NOTE TO READER: THESE MANAGEMENT PRESCRIPTION AREAS ARE MODELED AFTER THOSE USED IN THE JEFFERSON FOREST PLAN TO PROVIDE AS MUCH CONSISTENCY BETWEEN THE TWO FORESTS AS POSSIBLE. HOWEVER, MODIFICATION, DELETIONS AND ADDITIONS ARE NOTED WHEN NECESSARY FOR APPLICATION TO THE GEORGE WASHINGTON NF.

MANAGEMENT PRESCRIPTION AREAS CROSSWALK

1993 GW Management Area		Revised GW Management Prescription Area (consistent with Jefferson NF 2004 Plan)	
Code	**Description**	**Code**	**Description**
4	Special Interest Area - Biologic	4D	Botanical-Zoological Area
4	Special Interest Area - Historic	4E	Cultural - Heritage Area
4	Special Interest Area - Geologic	4C1	Geologic Area
4	Existing Research Natural Area	4B	Research Natural Area
4	Shenandoah Mount Crest - Cow Knob Salamander Conservation Area	8E7	Shenandoah Mount Crest - Cow Knob Salamander Conservation Area
6	Appalachian Trail	4A	Appalachian National Scenic Trail Corridor
5, 7	Scenic Corridors	7B	Scenic Corridors and Viewsheds
7	Highland Scenic Tour	7A1	Scenic Byway Area
7	Blue Ridge Parkway	7F	Blue Ridge Parkway
8	Designated Wilderness	1A	Designated Wilderness
8	Recommended Wilderness Study Area	1B	Recommended Wilderness Study Area
9	Remote Highlands	12D	Remote Backcountry - Nonmotorized Area
10	Eligible Scenic River	2C2	Eligible Scenic River
10	Eligible Recreational River	2C3	Eligible Recreational River Corridors
11	ATV Use Area	7C	ATV Use Areas
12	Developed Recreation Area	7D	Concentrated Recreation Areas
13	Dispersed Recreation Areas	7E1	Dispersed Recreation Areas - Unsuitable

13	Dispersed Recreation Areas (North River, Hidden Valley, Shaws Fork)	7E2	Dispersed Recreation Areas - Suitable
14	Remote Habitat for Wildlife	13	Mosaics of Habitat
15	Mosaics of Wildlife Habitat	13	Mosaics of Habitat
16	Early Successional Forested Habitats for Wildlife	13	Mosaics of Habitat
17	Timber Production - Suitable Timberland	13	Mosaics of Habitat
18	Riparian Area	11	Riparian Area/Corridors
20	Administrative Sites	5A	Administrative Sites
20	Utility Corridors	5C	Utility Corridors
20	Communication Sites	5B	Communication Sites
21	Big Schloss Special Management Area	12D	Remote Backcountry - Nonmotorized Area
21	Laurel Fork Special Management Area	12D (50%), 4D (50%)	Remote Backcountry - Nonmotorized Area and Special Biological Areas
21	Mt. Pleasant Special Management Area	4F	Mt. Pleasant Nat'l Scenic Area
21	Little River Special Management Area	1B and 8E7	Recommended Wilderness Study Area and Shenandoah Mtn Crest
22	Habitat for Small Game & Watchable Wildlife	7G	Pastoral Landscapes-Rangelands
		8E4a	Indiana Bat Primary Protection Area
		8E4b	Indiana Bat Secondary Protection Area

MANAGEMENT PRESCRIPTION AREAS

1A DESIGNATED WILDERNESS

There are six existing wildernesses (Ramseys Draft, Rich Hole, Rough Mountain, St. Mary's, The Priest, and Three Ridges). Small portions of Barbours Creek (20 acres) and Shawvers Run (95 acres) wildernesses that lie on the George Washington National Forest are managed under the revised Jefferson Forest Plan.

Emphasis:

The emphasis is to allow ecological and biological processes to progress naturally with little to no human influence or intervention, except the minimum impacts made by those who seek the wilderness as a special place offering opportunities to experience solitude and risk in as primitive surroundings possible.

Desired Condition:

The Wilderness Act of 1964 describes wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. Wilderness is an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed to preserve its natural conditions. Wilderness generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. It has outstanding opportunities for solitude or a primitive and unconfined type of recreation. It has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition. And, it may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value."

These areas retain a natural evolving landscape character shaped primarily by natural processes. These landscapes feature a structurally diverse older aged forest community with a continuous forested canopy, with the exception of occasional gaps created by storms, insects, diseases, or fire. The valued character of these landscapes is intact with no deviations.

By the year 2064, visibility will return to natural conditions as mandated by EPA's Regional Haze Regulation and Clean Air Act Amendments of 1977. Land managers interact with regional consortia of states (e.g., Visibility Improvement States and Tribal Association of the Southeast) to improve visibility conditions in the James River Face Wilderness, a Class I area. Visibility improves incrementally during this planning period as the Regional Haze Regulation is implemented (US EPA, 1997).

Natural processes will eventually result in a large patch of late successional to old growth forest matrix dominated by shade tolerant hardwoods and white pines throughout most of this area. Rare communities and associated species not dependent upon disturbance will continue to exist. Disturbance dependent communities will decline across this prescription area, and be confined to small brushy and herbaceous gaps and occasional large openings from natural disturbance events. Insects and diseases, primarily gypsy moth, hemlock woolly adelgid, oak decline, and southern pine beetle, play a major role in shaping future species composition and successional stages across these areas. Non-native vegetation occurs only as transients and is not self-perpetuating. Cavity trees, cull trees, standing dead trees, and down logs are common throughout the area as a result of natural mortality.

Wildlife species associated with area-sensitive mid- to late-successional forest habitats that are expected to inhabit this area include: ovenbird; cerulean warbler; and black-billed cuckoo. Management of the area is focused on protecting and preserving the natural environment from human

influences. Timber harvest is not appropriate within this prescription area. Unplanned natural ignition fires may be used to restore and maintain the historic fire regime. Prescribed fire may be used to reduce the risks and consequences of wildland fire escaping from the area. Integrated pest management favoring biological controls may be used to eradicate or suppress non-native invasive pests. Non-commercial felling of trees with hand tools may be used to construct and maintain trails.

Recreation management is designed to provide solitude and remoteness in the most primitive and natural recreation setting possible. To this end, access to the area is limited. Trailheads at surrounding roads are designed with sensitivity to scale and character to set the tone for experiencing a primitive recreation experience. Once in the designated wilderness, visitors on foot or horseback must rely, to varying degrees, on their own personal physical abilities and primitive recreation skills. Wilderness recreation includes inherent risks. Visitors are isolated from the sights and sounds of others and encounters with other visitors are rare. Travel within wilderness is strictly non-motorized.

The desired condition of the St. Mary's River and its tributaries is for them to be of sufficient quality to support the biota native to the streams. Until the impacts of acid deposition are gone, the interim desired condition is that the pH and alkalinity of the streams are managed to reflect the natural conditions that would support the native biota.

Most visitor information is dispensed outside of the wilderness at trailheads and through off-site public information and education efforts. Wilderness visitors are encouraged to "pack-it-in and pack-it-out" and to "leave no trace." Wilderness trails lie lightly on the land, typically narrow footpaths or horse trails with minimum directional signing that blends well with the natural surroundings. Visitors are physically challenged as they ford streams and climb over downed trees.

Very few facilities are provided. Permanent human-made shelters may be present if they existed prior to wilderness designation, particularly along the Appalachian National Scenic Trail. Construction of new shelters on new sites within wilderness is not appropriate, unless there is an obvious and overriding need to protect the natural resources from visitor impacts. Structures including signs, bridges, waterbars, and constructed water sources for the comfort or convenience of visitors in wilderness are minimal. The few structures appearing in wilderness are generally for the protection of resources or were present prior to wilderness designation.

The Federal Government owns the lands within the boundaries of designated wilderness areas, both surface and subsurface, with no encumbrances.

1A - Designated Wilderness

Standards

General

1A-001 Motorized transport or mechanized equipment is not allowed, except in emergencies. All such uses require advance approval. See specific exceptions in the standards under Fire, Law Enforcement, Recreation, Appalachian Trail, and Forest Health.

Water, Soil, and Air

1A-002 Maintain soils in a natural undisturbed state, except for approved watershed restoration projects, wildland fire control measures, campsite rehabilitation, and trail construction, use, and maintenance. Favor natural healing of disturbed sites.

1A-003 Allow mitigation for acid rain and other pollution effects and evaluate on a case-by-case basis with Regional Forester approval.

Terrestrial and Aquatic Species

1A-004 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife are not maintained, and succeed to forest, deteriorate over time, or are removed. New permanent wildlife openings are not created.

1A-005 Allow stocking only to reestablish or maintain indigenous, threatened, endangered, or sensitive species with Forest Supervisor authorization.

Rare Communities and Old Growth

1A-007 Rare communities are only maintained through natural processes, with the exception of appropriate management associated with threatened, endangered, sensitive, or locally rare species.

Vegetation and Forest Health

1A-008 Forest insect and disease outbreaks are controlled only if necessary to prevent unacceptable damage to resources on adjacent land, prevent an unacceptable loss to the wilderness resource due to non-native pests, or protect threatened, endangered, and sensitive species.

1A-009 Use control measures that have the least adverse impact on the wilderness resource. Favor biological control methods.

1A-010 Actions to control Insects and diseases may be approved by the Regional Forester under the following conditions:

- There is an immediate threat of unacceptable damage to resources outside the wilderness boundary and the threat cannot reasonably be abated by control actions taken outside the wilderness boundary; or
- There is an immediate threat of unnatural loss of the wilderness resource due to a non-native insect or disease.

1A-011 Eradicate non-native invasive plants when the infestations are isolated. Use hand-applied chemicals, with Regional Forester approval, when necessary.

Timber Management

1A-012 These lands are classified as withdrawn from timber production. Timber harvest is not allowed.

Non-timber Forest Products

1A-013 Do not issue authorizations for the commercial use of any forest products.

1A-014 Allow personal-use collection of dead and down wood only for on-site campfire use.

1A-015 Allow personal-use collection of non-timber forest products (nuts, berries, pinecones, etc.), provided they are not threatened, endangered, sensitive or locally rare.

Wildland Fire Suppression

1A-016 Use Minimum Impact Suppression Tactics (MIST) which employ suppression methods and equipment that cause the least alteration of the wilderness landscape, least disturbance of the land surface, least disturbance to visitor solitude, least reduction of visibility during periods of visitor use, and least effects on air-quality-related values.

Prescribed Fire and Unplanned Natural Ignitions Use

1A-017 Management-ignited prescribed fire is allowed to reduce a buildup of fuels to an acceptable level and to decrease the risks and consequences of wildland fire escaping from wilderness.

1A-018 With an approved fire plan, unplanned natural ignition use is allowed to permit lightning-caused fires to play, as nearly as possible, their natural ecological role.

1A-019 With the exception of firelines, only allow rehabilitation of a burned area if necessary to prevent an unacceptable loss of wilderness resources or to protect resources outside the wilderness. Do necessary revegetation work with plant species native to the wilderness area.

Recreation

1A-020 Wilderness areas are managed for the Primitive Recreation Opportunity although actual ROS classes may range from Semi-Primitive Non-Motorized (SPNM) to Roaded Natural (RN).

1A-021 Construct, relocate, and maintain trails to the minimum standard necessary for protection of the soil, water, vegetation, visual quality, user safety, and long-term maintenance. Emphasize trails that appear to be part of the wilderness environment and not an intrusion upon it.

1A-022 Blazing of trails is allowed only on the Appalachian Trail.

1A-023 Use of hand-held power tools, like chainsaws, to reopen trails following catastrophic natural events may be authorized by the Regional Forester.

1A-024 Minimize use of trail bridges or foot logs. Bridges are not installed for user convenience. Construct bridges if necessary for wilderness resource protection or for safety reasons. Design bridges to minimize impact on the wilderness resource. Select locations that minimize the size and complexity of the structure.

1A-025 Provide the minimum number of signs for the regulation or information of the user and the protection of the wilderness resource. Do not include distances to destination points on trail signs or directional arrows within the wilderness. Encourage use of trail maps.

1A-026 Groups entering the wilderness will not exceed 10 persons.

Appalachian Trail

1A-027 Plan and carry out activities in cooperation with appropriate Appalachian Trail management partners.

1A-028 Horse and pack stock are prohibited on the Appalachian Trail footpath.

1A-029 Existing Appalachian Trail shelters and associated facilities may be maintained. When existing trail shelters deteriorate to the point that they must be replaced or reconstructed, analyze the shelter location. When possible, relocate shelters to appropriate sites outside of wilderness.

Scenery

1A-030 Management activities such as trail construction, maintenance, and signing are designed to meet or exceed a very high scenic integrity objective.

1A-031 Non-historical remnants such as old railroad ties and culverts causing unacceptable visual impact are removed.

Range

1A-032 Livestock grazing is not permitted unless specifically authorized in the designating legislation.

Minerals

1A-033 These areas are withdrawn from Federal oil and gas and other Federal mineral leases. Allow existing Federal leases to continue until expiration. Do not reauthorize. Allow roads, pipelines, utilities, and other facilities per existing Federal leases.

1A-034 These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed when: a) the materials are used within the wilderness itself; and b) use is necessary to protect the wilderness resource.

1A-035 Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to minimize surface disturbances when possible. (See also standards under Lands).

Roads

1A-036 Do not permit road construction and reconstruction, subject to valid existing rights or leases.

1A-037 Favor natural revegetation of closed roads. Plant with native species only if the area is not expected to revegetate naturally in a reasonable time.

Lands and Special Uses

1A-039 Wilderness areas are not available for new special uses, except for research and outfitter-guide operations allowed under the Wilderness Act. Phase out existing non-conforming uses.

1A-040 Allow commercial use by outfitters and guides if compatible with preservation of the wilderness values. Do not allow contest events such as foot races or horseback endurance events. Require outfitters and guides to use leave-no-trace techniques. Do not allow permanent camps.

1A-041 Limit the size of commercial and organized groups to 10.

Research and Monitoring

1A-042 Evaluate research proposals and scientific studies for which use of a wilderness is essential. Allow research that is compatible with wilderness management objectives.

1A-043 Allow collection of specimen plants for research with Forest Supervisor authorization.

Law Enforcement and Search and Rescue

1A-044 The county or counties where the wilderness areas are located have the responsibility for search and rescue of lost or injured visitors. Forest personnel will provide assistance when requested for such things as scouting services, detailed maps, aerial photography, and detailed information about the area.

1A-045 Require Forest Supervisor approval for motorized equipment for search-and-rescue and law enforcement operations within the wilderness area in advance. Use of motorized equipment is limited to emergencies involving inescapable urgency such as: (a) health and safety, (b) law enforcement involving serious crimes or fugitive pursuit, (c) removal of deceased persons, and (d) aircraft accident investigation.

1B RECOMMENDED WILDERNESS STUDY AREA

The areas that are recommended to Congress for wilderness study include the following areas (as mapped): Little River, Ramsey's Draft Addition, Rich Hole Addition, Rough Mountain Addition, and Saint Mary's Addition (current response to Need for Change).

Emphasis:

These areas are managed to protect their wilderness characteristics pending legislation as to their classification and provide for existing uses where compatible with protecting wilderness character.

Desired Condition:

The desired condition for the wilderness resources and recreation opportunities in this area is the same as described in 1A above. Removal and restoration of human influences may occur. Timber harvest is not appropriate within this prescription area. This type of management is to continue until Congress decides whether to include the area in the national wilderness preservation system.

1B - Recommended Wilderness Study Area

Standards

General

1B-001 These areas are managed as wilderness pending final Congressional action. Standards for 1A apply except where otherwise noted below. In 1B, the Forest Supervisor approves items requiring Regional Forester approval in 1A.

1B-002 Allow motorized equipment for needed restoration work prior to congressional designation as wilderness.

Timber Management

1B-003 These areas are classified as unsuitable for timber production, pending final Congressional action. Timber harvest is not appropriate.

Wildland Fire Suppression

1B-004 Allow rehabilitation of firelines and the burned area to prevent an unacceptable loss of future wilderness resources or to protect resources outside the area. Do necessary revegetation work with plant species native to the wilderness area. Evidence of firelines is obliterated as soon as practicable.

Prescribed Fire and Unplanned Natural Ignitions Use

1B-005 Management-ignited prescribed fire and unplanned natural ignition use are allowed to reduce a buildup of fuels, to restore native forest communities, to maintain threatened, endangered, sensitive, and locally rare species habitat, and to decrease the risks and consequences of wildland fire escaping from the area.

1B-006 Allow rehabilitation of firelines and the burned area to prevent an unacceptable loss of future wilderness resources or to protect resources outside the area. Do necessary revegetation work with plant species native to the wilderness area. Evidence of firelines is obliterated as soon as practicable.

Recreation

1B-007 Decommission facilities that are not compatible with a wilderness environment.

Minerals

1B-008 These areas are administratively unavailable for federal oil and gas and other federal mineral leases, pending final Congressional action. Allow existing Federal leases to continue until expiration. Do not reauthorize. Allow roads, pipelines, utilities, and other facilities per existing Federal leases.

1B-009 These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed.

1B-010 Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted.

Roads

1B-011 Do not permit road construction and reconstruction, subject to valid existing rights or leases.

1B-012 Decommission all roads. Motorized equipment use is allowed to decommission roads. Prior to decommissioning, manage all roads as closed.

2C2 - Eligible Scenic Rivers

About 55 miles are eligible for the National Wild and Scenic River System under the scenic river designation. Scenic rivers have corridor widths of 1/4-mile on each side of the river. For river segments that are eligible for designation, their outstandingly remarkable values and free flowing conditions that made them eligible are maintained. The eligible portions of these rivers and the one-quarter mile wide corridors on each side are managed to meet the requirements of the Wild and Scenic Rivers Act of 1968.

As described in the Act, a scenic river is a river or section of river that is "free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

This area includes: Segment A of Back Creek, Cedar Creek, Segment B of Jackson River, Segment C of Jackson River, Segment B of North River and Segment B of Tye River. This management prescription contains approximately xx acres (x%) of the George Washington National Forest. The outstandingly remarkable values of these eligible river segments will be protected to the extent possible.

Emphasis:

The primary emphasis of these rivers and their associated corridors is to protect and enhance the outstandingly remarkable scenic and geologic values as well as perpetuating the undeveloped setting and non-motorized access that led to the “scenic” classification. These river segments will be preserved in a free-flowing condition for the benefit, use, and enjoyment of present and future generations.

Desired Condition:

Eligible river segments and their immediate environments are managed to preserve free-flowing conditions and to protect the outstanding values of the segments: scenic, recreation, geologic, fish and wildlife, historic, cultural, and similar values that made them eligible. Until designation decisions are made or other river studies are conducted, National Forest System lands associated with each eligible river corridors are managed to perpetuate or enhance each rivers current conditions. Characteristics of the rivers and their corridors are not reduced below the standards for classification as a Scenic River.

The river and a one-quarter mile corridor on each side exist in a natural to near-natural setting and possess outstanding scenic quality. These areas retain a natural evolving landscape character shaped primarily by natural processes. The valued character of these landscapes is intact with no deviations. The characteristic landscape is that of continuous forest cover of predominantly hardwood species. Occasional small openings in the forest exist. The terrain is generally steep adjacent to the river, however some areas do possess a wide, flat river valley. Intermittent and perennial streams flow unobstructed from the side slopes into the river.

The river and its channel are not modified except for fisheries habitat improvements. Dams or other structures that impede the flow of the river are prohibited. Some activities related to management of riparian dependent resources or wildlife habitat activities may be evident. The river user is aware that man’s past activities have changed the original character of the river and its surrounding landscape only in selected areas and for short stretches. Most users are not offended by these sights.

Recreation use on the river and within the corridor is not concentrated, and visitors have the opportunity to experience some solitude and enjoy the primitive character of the surrounding landscape. Opportunities for wildlife viewing are good. In some areas the hydrologic processes over time have exposed geologic features.

Water-based recreation activities such as swimming, wading, fishing, canoeing, rafting, and kayaking occur in the Rivers. The use of motor powered boats may be permitted in designated areas. Land-based recreation activities include hunting, hiking, horseback riding, and other activities that do not disturb the serenity of the area. OHV use occurs only on existing open roads.

Access to scenic river segments is provided at select locations. Facility emphasis is on health, safety, and resource protection plus some degree of user convenience. Roads, trails, and dispersed campsites are managed to discourage impacts to lakes, streams, and fragile soil resources.

Lands within scenic river corridors are classified unsuitable for timber production.

Recreation management is designed to provide solitude and remoteness in the most primitive and natural recreation setting possible. To this end, access to the area is limited to roads outside of the corridor, except reasonable access necessary to exercise development of private mineral rights. Trailheads at perimeter roads are designed with sensitivity to scale and character to perpetuate the scenic integrity of the area.

Signs are designed to complement the natural environment in scale, character, and color. Most visitor information is provided outside of the scenic river corridor at trailheads and through off-site public information and education efforts. Scenic river visitors are encouraged to "pack-it-in and pack-it-out" and to "leave no trace."

Wildland fires may be used to restore and maintain the historic fire regime. Integrated pest management favoring biological controls may be used to eradicate or suppress non-native invasive pests. Non-commercial felling of trees may be used to construct and maintain trails.

2C2 - Eligible Scenic Rivers

Standards

General

2C2-001 All management activities within this corridor must be compatible with the outstandingly remarkable values for the River.

Water, Soil, and Air

2C2-002 Maintain soils in a natural, undisturbed state, except for approved watershed restoration projects, wildland fire control measures, campsite rehabilitation, and trail construction, use, and maintenance. Favor natural healing of disturbed sites.

2C2-003 Instrumentation necessary for monitoring reference watershed conditions is allowed. Such instrumentation is designed to be unnoticeable to visitors.

Terrestrial and Aquatic Species

2C2-004 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife are maintained when they enhance the outstanding scenic values of the river corridor. New permanent wildlife openings are not created.

2C2-005 Allow stocking only to reestablish or maintain indigenous, threatened, endangered, or sensitive species with Forest Supervisor authorization.

Rare Communities and Old Growth

2C2-006 Rare communities are maintained through natural processes, with the exception of appropriate management associated with threatened, endangered, sensitive, or locally rare species.

2C2-007 All large, medium and small patches of old growth are maintained within this prescription area.

Vegetation and Forest Health

2C2-008 Suppression, eradication, and Slow the Spread actions to control gypsy moth infestations are allowed.

2C2-009 Actions to eradicate or suppress hemlock woolly adelgid infestations are allowed.

2C2-010 Eradicate non-native invasive plants when the infestations are isolated. Use hand-applied chemicals, with Forest Supervisor approval, when necessary.

2C2-011 Felling and leaving of individual trees is allowed for public safety and trail maintenance within appropriate trail clearing limits.

2C2-012 Allow vegetation management activities to:

- Maintain or enhance outstandingly remarkable values of the river corridor;
- Enhance or rehabilitate scenery;
- Provide for public health and safety.

Timber Management

2C2-013 These lands are classified as unsuitable for timber production. Timber harvest is not allowed unless associated with reasonable access to valid existing rights.

Non-timber Forest Products

2C2-014 Do not issue authorizations for the commercial or personal use of any forest products.

Wildland Fire Suppression

2C2-015 Lightning fires are generally suppressed to minimize acreage burned, due to high levels of publis use and infrasrucure investments in these corridors.

Prescribed Fire and Wildland Fire Use

2C2-016 Vegetation management may be accomplished with management-ignited prescribed fire and mechanical treatments as an appropriate method of reducing costs associated with these activities.

Scenery

2C2-017 Management activities are designed to meet or exceed a high scenic integrity objective in all scenic classes.

Recreation

2C2-018 Eligible Scenic River corridors are managed with a range of recreation opportunities from roaded natural to semi-primitive motorized and semi-primitive non-motorized.

2C2-019 These corridors are unsuitable for designation of new ATV routes or use areas.

2C2-020 Restore existing trail including steps and bridges, when necessary, using native materials and Civilian Conservation Corps construction techniques.

2C2-021 Provide the minimum number of signs for the regulation or information of the user and the protection of the scenic values.

2C3 ELIGIBLE RECREATIONAL RIVERS

The following rivers are eligible for the National Wild and Scenic River System under recreational river designation. There are approximately 200 miles that qualify as recreational rivers. Recreational rivers have corridor widths of 1/4-mile on each side of the river. For river segments that are eligible for designation, their outstandingly remarkable values and free flowing conditions that made them eligible are maintained. The eligible portions of these rivers and the one-quarter mile wide corridors on each side are managed to meet the requirements of the Wild and Scenic Rivers Act of 1968.

As described in the Act, recreational rivers are rivers or sections of river that are "readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

There are approximately xxx acres in the recreation river corridor.

Table 1. Eligible Recreational rivers on the GWNF

Eligible Recreational Rivers
Segment B of Back Creek
Segments A & B of Cowpasture River
Segment C of Passage Creek
Segment D of Jackson River
North Fork of Shenandoah River
South Fork of Shenandoah River

Emphasis:

These river segments and their associated corridors are eligible to be a part of the National Wild and Scenic Rivers System. They are managed to protect and perpetuate the outstandingly remarkable values that led to their eligibility status and classification as "recreational."

Desired Condition:

The primary emphasis for management of the river and river corridor is to protect and enhance the outstandingly remarkable values of that river or river segment. The recreational river corridor provides outstanding opportunities for people to enjoy a wide variety of river oriented recreation opportunities in an attractive setting. The river is readily accessible by roads and may be accessed by railroads as well. Transportation facilities may parallel the river for long stretches.

There is a low need for visitors to rely on their personal physical abilities and primitive recreation skills within these areas. The sights and sounds of other visitors are evident, and opportunities to encounter other visitors are moderate to high. Visitors seeking solitude may find that difficult to achieve, particularly in peak use seasons. Trails may be highly developed, including hardened trails for a high level of accessibility for persons of all abilities. Motorcycles and/or all-terrain vehicles may be permitted on designated trails.

The landscape character ranges from natural appearing to transitional-mixed use. There is substantial evidence of human activity along the shores of these rivers on adjoining private lands, sometimes including modern residential development, commercial structures, and a full range of various agricultural and forestry uses. On National Forest System lands, visitors enjoy a natural-appearing setting with a range of man-made recreational developments. Prescribed fire, felling and removal of trees, domestic livestock grazing, and integrated pest management activities may be observed. Utility transmission corridors, communication facilities, or signs of mineral development activity associated with reserved and outstanding mineral rights may be observed as well as controlled mineral activities under lease and use of mineral materials. The goal is to blend these uses into the background so that they remain visually subordinate to the natural landscape. Existing scenic integrity may range from high to very low, but the objectives on National Forest System lands are moderate or higher.

Since there is the potential for large numbers of visitors at peak use seasons, regulations are necessary for protection of resources and visitors. Information is provided at bulletin boards or kiosks at the river, as well as at off-site Forest Service visitor centers and in brochures. Visitors are encouraged to practice minimum impact techniques while recreating. Trash receptacles may be provided at parking areas and high use areas. Facilities of a modern nature are present to provide for visitor safety and comfort and to protect the river resources. Facilities are designed to fit the character of the specific sites where they are located. This could range from semi-primitive to rural. Facilities might include parking areas, trailheads, bulletin boards, interpretive kiosks, signs, restrooms, canoe/raft launches, fishing platforms, picnic sites, etc.

These areas are characterized by a predominance of mid- and late-successional forests with a high to intermediate tolerance to shade. Forest structure varies according to ecological factors, but largely consists of a mature overstory of hardwoods, occasionally mixed with pines, a fairly open midstory, and a well-developed herbaceous and shrubby understory. Structural diversity within mixed mesophytic and dry-to-mesic oak forest communities may be enhanced through commercial and non-commercial vegetation management activities. Understory vegetation includes a variety of native deciduous and evergreen flowering trees, shrubs and wildflowers. Even- and uneven-aged forest communities are managed throughout the area, along with continued development of medium and small patches of late successional to old growth forest communities. Wildlife viewing opportunities are maintained and expanded and up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully when compatible with the outstandingly remarkable values of the river corridor. Management activities and controls ensure rare communities and associated species continue to exist in the area.

2C3 - Eligible Recreational Rivers

Standards

General

2C3-001 All management activities within this corridor must be compatible with the outstandingly remarkable values for the River.

Terrestrial and Aquatic Species

2C3-002 Allow creation of up to four percent early-successional forest habitat.

2C3-003 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Rare Communities and Old Growth

2C3-004 All large, medium, and small old growth patches are maintained within these corridors.

Vegetation and Forest Health

2C3-005 Allow salvage of dead, dying, or damaged trees to maintain or enhance outstandingly remarkable values.

2C3-006 Allow vegetation management activities to:

- Maintain or enhance outstandingly remarkable values of the river corridor;
- Enhance or rehabilitate scenery;
- Maintain developed recreation facilities, including roads and trails;
- Enhance both game and non-game wildlife habitat;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Maintain, enhance, or restore the diversity and complexity of native vegetation;
- Suppress or control insect and disease outbreaks;
- Control non-native invasive vegetation;
- Reduce fuel buildups; or
- Provide for public health and safety.

2C3-007 Aggressively control insect and disease outbreaks when threatening the outstandingly remarkable values of the river corridor or when needed for safety or legal reasons. Consider eradication of recently established non-native pests. Favor the most effective control method.

Timber Management

2C3-008 These lands are classified as unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

Wildland Fire Suppression

2C3-009 Lightning fires are generally suppressed to minimize acreage burned due to high levels of public use and infrastructure investments in these corridors.

Prescribed Fire and Unplanned Natural Ignitions Use

2C3-010 Vegetation management may be accomplished with management-ignited prescribed fire and mechanical treatments as an appropriate method of reducing costs associated with these activities.

Recreation

2C3-011 These corridors are unsuitable for designation of new ATV routes or use areas.

Scenery

2C3-012 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

Minerals

2C3-013 These corridors are available for federal oil and gas leasing with controlled surface use to protect the outstandingly remarkable resources of the river. Other Federal minerals may be available on a case-by-case basis.

2C3-014 Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect the outstandingly remarkable resources of the river corridor.

2C3-015 Some of these areas are underlain by private mineral rights. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to protect outstandingly remarkable values when possible.

Roads

2C3-016 Road construction, reconstruction, and decommissioning are informed by a watershed-scale or site-specific road analysis considering effects on the outstandingly remarkable values.

2C3-017 Allow road construction or reconstruction to improve recreational access, improve soil and water, to salvage timber, or to protect property or public safety.

2C3-018 Decommission roads that are causing environmental damage, degrading outstandingly remarkable values, or to manage visitor use and access.

Lands and Special Uses

2C3-019 These areas are suitable for new utility structures, such as new transmission, gas, or water lines, only in the location with the least impacts to scenic integrity.

2C3-020 Screen overhead utility lines and support towers.

2C3-021 Allow other special uses when consistent and compatible with protection of the outstandingly remarkable values of the river corridor.

4A APPALACHIAN NATIONAL SCENIC TRAIL CORRIDOR

Additional management direction for management of the Appalachian Trail corridor can be found in: *National Trails System Act (Public Law 90-543, as amended); Appalachian Trail Comprehensive Plan; Landscape Aesthetics (Agriculture Handbook 701); Forest Service Directives (FSM, FSH, and supplements); Appalachian Trail Design, Construction, and Maintenance (ATC Stewardship Manual, second edition, 2000); Appalachian Trail Overnight-Use Management Principles; Checklist for the Location, Construction, and Maintenance of Campsites and Shelters on the Appalachian Trail (ATC Stewardship Series, revised 1989); Local Management Plans for the Appalachian Trail; Wilderness Act of 1964; Eastern Wilderness Act of 1975; Virginia Wilderness Acts; Numerous Memoranda of Agreement and Memoranda of Understanding between the USDA Forest Service, the National Park Service.*

This prescription area consists of those lands mapped as the foreground area visible from the Appalachian National Scenic Trail[1] footpath, and—as designated on a case-by-case basis—associated trail shelters, overnight use sites, viewpoints, water sources and spur trails. This prescription area also includes all National Forest System lands acquired by the National Park Service for the Appalachian Trail and administratively transferred to the USDA Forest Service by the National Park Service under a Memorandum of Agreement.

The Appalachian National Scenic Trail is administered by the Secretary of the Interior in consultation with the Secretary of Agriculture, and is managed as a partnership between the Forest Service, the National Park Service Appalachian Trail Park Office, the Appalachian Trail Conference, and Appalachian Trail Conference-affiliated local Appalachian Trail clubs. Management is in accordance with the National Trails System Act and the Appalachian Trail Comprehensive Plan utilizing the cooperative management system.

Emphasis:

Management practices are designed to protect the Appalachian Trail experience, preserve and strengthen the role of volunteers and volunteer organizations, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Trail passes. Lands adjoining the prescription area seen from the Appalachian Trail will be managed for multiple use under the provisions of this plan, in a manner which will reasonably harmonize with and be complementary to the Appalachian Trail experience.

Desired Condition:

The Appalachian Trail is a way, continuous from Katahdin in Maine to Springer Mountain, Georgia, traversing the GW National Forest for travel on foot through the wild, scenic, wooded, pastoral, and culturally significant lands of the Appalachian Mountains. The Appalachian Trail is usually a simple footpath, purposeful in direction and concept, favoring the heights of land, and located for minimum reliance on construction for protecting the resource. The body of the Trail is provided by the lands it traverses, and its soul is in the living stewardship of the volunteers and workers of the Appalachian Trail community.

Views from the Appalachian Trail are predominantly forested, sporadically intermixed with meadows, old fields, pastoral valleys, and cultural landscapes. Occasionally, the Appalachian Trail traverses high elevation balds and openings, which afford hikers unique and outstanding views. The Appalachian Trail offers a diversity of topography and a variety of vegetation and animal life exposing the hiker to the entire range of land forms, water features, history, and uses of the land that are found along the Appalachian Mountains.

The prescription area consists of those lands mapped as foreground from the Appalachian Trail footpath and designated viewpoints, shelters, campsites, water sources, and spur trails linking these features, utilizing the Scenery Management System. The prescription area has a minimum width of 100 feet on either side of the Appalachian Trail footpath for protection from social, aural, and other impacts, but this minimum width should be considered only when the foreground zone does not extend beyond 100 feet on either side of the Appalachian Trail footpath.

Facilities include the Appalachian Trail footpath itself, shelters approximately one day's hike apart, designated overnight-use sites, privies, trailhead parking areas, and information boards at road crossings. The footpath itself wears lightly on the land, and is designed, constructed, and maintained for foot travel only. Associated structures are in harmony with the surrounding environment.

This prescription area traverses a range of Recreation Opportunity Spectrum classes. Management of the Appalachian Trail setting will either be consistent with or complement the semi-primitive non-motorized Recreation Opportunity Spectrum class. The linear nature of this prescription area is recognized in determining the Recreation Opportunity Spectrum class.

Recreation management is designed to provide a variety of opportunities in the most primitive and natural recreation setting possible. Careful acquisition and trail design has allowed an appearance of a more primitive setting than the Recreation Opportunity Spectrum would predict. Trailheads are designed with sensitivity to scale and character to set the tone for a non-motorized experience. Motorized recreation, bicycles, horses, and pack stock are not allowed on the Appalachian Trail footpath, although there are some rare exceptions (see Standards). Roads within ½ mile of the Appalachian Trail are managed with hiker security, safety, and Appalachian Trail values in mind.

Roads, utility transmission corridors, communication facilities, or signs of mineral development activity exist or may be seen within the prescription area, although the goal is to avoid these types of facilities and land uses to the greatest extent possible and blend facilities which cannot be avoided into the landscape so that they remain visually subordinate.

This prescription area retains a natural, forested or pastoral landscape character shaped by both natural processes and humans. Management practices are modified to recognize the nationally significant aesthetic and recreational values of these lands. Low intensity vegetation management is appropriate to maintain the long term goals and stewardship objectives of the Appalachian National Scenic Trail prescription area. Management activities needed to preserve or create vistas and desirable open areas are a high priority. Activities are planned and carried out in cooperation with appropriate Appalachian Trail management partners.

This prescription area is characterized by a predominance of mid- and late-successional forests with multiple canopy layers, which provide a variety of habitat niches, and thermal and protective cover for wildlife. Small to medium patches of old growth forest communities continue to develop throughout this area. Existing levels of early successional habitat conditions are maintained including: meadows, old fields, and openings created by flooding, wind damage, wildland fire, insect/disease infestations, or vegetation management activities. Occasional large openings of early successional habitat may be maintained as old fields and pastoral landscapes, as well as created through natural disturbance.

4A - Appalachian National Scenic Trail Corridor

Standards

Terrestrial and Aquatic Species

4A-001 Maintain the existing early-successional forest habitat within this prescription area when compatible with Appalachian Trail values. Take advantage of natural disturbance events and continued maintenance of existing openings to meet the needs for early successional habitats.

4A-002 To enhance the Appalachian Trail environment, wildlife and fish habitat improvements are allowed. Existing wildlife openings, pastoral areas, or old fields may be maintained. Expansion of existing openings and/or creation of new openings may occur when compatible with Appalachian Trail values. Maintenance methods may include cultivation, grazing, herbicides, mowing, and burning. Use of native species will be emphasized.

Vegetation and Forest Health

4A-004 Vegetation is managed only to enhance the Trail environment. Allow timber harvest, prescribed burning, unplanned natural ignition use, hand tools, power tools, mowing, herbicides, biological controls, and grazing to manage vegetation as appropriate. Vegetation management activities are limited to:

- Maintain open areas, old field habitats, and vistas that enhance the scenic qualities of the Appalachian Trail;
- Control insects and diseases;
- Maintain or improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities, species dependent on disturbance, and wildlife viewing opportunities;
- Meet trail construction and maintenance needs, including shelters;
- Manage fuels;
- Restore, enhance, or mimic historic fire regimes;
- Control non-native invasive vegetation;
- Provide for public safety or resource protection.

Timber Management

4A-005 The lands in this prescription area are classified as unsuitable for timber production.

4A-006 Hauling or skidding along the Appalachian Trail footpath itself or using the Appalachian Trail for landings or temporary roads is prohibited. Hauling and skidding within the prescription area will be allowed only if the environmental analysis indicates that this is the only feasible and prudent alternative.

Wildland Fire Management

4A-007 Suppression strategies will strive to minimize impact on Appalachian Trail values.

4A-008 Prohibit heavy equipment line construction on the Appalachian Trail footpath, unless necessary for emergency protection of public property and safety.

4A-009 Implement restorative measures in areas damaged by fire-suppression efforts after fire-suppression efforts have ceased.

Prescribed Fire and Unplanned Natural Ignitions Use

4A-010 Prohibit heavy equipment line construction on the Appalachian Trail footpath.

4A-011 Implement needed restorative measures after prescribed fire or unplanned natural ignition use projects.

Recreation

4A-012 Motorized, horse, pack stock, and bicycle use on the Appalachian Trail are prohibited. Exceptions include where the Appalachian Trail crosses or is located on open Forest Service system roads; other federal, state, county or other public roads or as needed for management of the Appalachian Trail; or for administrative or emergency purposes.

4A-013 Other uses within the prescription area, including crossings of the Appalachian Trail, may be considered following coordination with appropriate Appalachian Trail partners. Locate authorized uses crossing the Appalachian Trail to minimize impacts to the Appalachian Trail environment, preferably where impacts already exist.

4A-014 Overnight camping will be allowed, unless prohibited by Forest Supervisor's order.

4A-015 Identify the Appalachian Trail through standard signs and blazes.

4A-016 Locate and maintain shelters, campsites, and privies where there is a demonstrated need for overnight use.

4A-017 Reconstruct or relocate existing portions of the Appalachian Trail as needed to enhance the recreation experience, protect threatened, endangered, sensitive, and locally rare species; protect the health of the ecosystem; or protect heritage resources. Such relocations provide a reasonable level of public safety.

4A-018 Limit additional development to facilities compatible with the Appalachian Trail.

4A-019 This area is unsuitable for designation of new ATV use areas.

Scenery

4A-020 All management activities will meet or exceed a Scenic Integrity Objective of High.

Minerals

4A-021 The prescription area is available for oil and gas leasing with a "no surface occupancy" stipulation. The area is not available for other Federal leasable minerals. When existing leases terminate or expire, new leases are changed to reflect this standard.

4A-022 These areas are not available for mineral materials.

Roads

4A-023 Authorize new roads within the Appalachian Trail prescription area only if entering the prescription area is the only feasible and prudent location.

Lands and Special Uses

4A-024 Issue non-recreational special-use authorizations only where compatible with Appalachian Trail management or where there is a demonstrated public need or benefit and where no other reasonable alternatives exist.

4A-025 Authorize recreational special uses only when they do not adversely affect Appalachian Trail values and resources as described by this management prescription. Limit recreation events such as foot races or horseback endurance events to designated crossings only. Only temporary authorizations of one year or less for use of the footpath are allowed due to the probability of changing trail conditions or management needs except for existing permits. Existing permits may be renewed when there is no proposed change in use, or changes in trail conditions or management needs. Permits will not be issued for overnight camping at Appalachian Trail shelters or within 300 feet of the footpath.

4A-026 Do not authorize vendor or peddler permits.

4A-027 Allow agricultural special-use authorizations to maintain open and pastoral spaces.

4A-028 Locate new public utilities and rights-of-way in areas of this management prescription area where major impacts already exist. Limit linear utilities and rights-of-way to a single crossing of the prescription area, per project.

4A-029 Require mitigation measures including screening, feathering, and other visual management techniques to mitigate visual and other impacts of new or upgraded utility rights-of-way. Mitigation measures apply to facilities as well as vegetation.

4A-030 This management prescription area is unsuitable for special-use authorizations for new communication sites and wind generation sites.

4B - Little Laurel Run Research Natural Area Management Prescription Area

Research Natural Areas are part of a national network of ecological resources designated for research, education and maintenance of biological diversity on National Forest System lands. These areas are designated by the Regional Forester, U.S. Forest Service. Research Natural Areas are principally for non-manipulative research, observation, and study.

The Little Laurel Run Research Natural Area (2,000 acres) was established in 1938 and is located on the North River Ranger District. The other research natural area is the Ramseys Draft Research Natural Area (established in 1935) which is within the Ramseys Draft Wilderness and therefore, managed under that wilderness direction.

Emphasis:

Manage for scientific research in an undisturbed state as a baseline for comparison with other forest environments.

Desired Condition:

The RNA and its ecosystems continue to furnish ecological information of value to the Forest Service and society at large. The area continues to representative of the ecosystems it was established to represent. The landscape character will be natural evolving. Human uses are not causing detectable ecological change.

Species which occur in vegetation types influenced by natural environmental and ecological processes predominate. Visitors to a Research Natural Area can expect to see examples of the natural plant communities native to that physiographic region.

Vegetation is influenced by natural processes. The lands are classified as unsuitable for timber production.

Standards

Vegetation and Forest Health

4B-001 Native forest insect and disease outbreaks are controlled only to protect threatened, endangered, and sensitive species. Non-native invasive insects and diseases may be eradicated or suppressed. Favor biological control methods.

4B-002 Eradicate non-native invasive plants when the infestations are isolated. Use hand-applied chemicals, with Forest Supervisor approval, when necessary.

Timber Management

4B-003 These lands are classified as unsuitable for timber production.

Non-timber Forest Products

4B-004 Do not permit the collection of non-timber forest products, except for scientific purposes as permitted by the Forest Supervisor.

Prescribed Fire and Unplanned Natural Ignitions Use

4B-005 Prescribed fire and unplanned natural ignition use are allowed to maintain the Prescription Area emphasis.

Recreation

4B-006 These areas are unsuitable for designation of new ATV use areas.

Scenery

4B-007 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

1	2	3	4	5	6	7
VH	VH	VH	VH	VH	VH	VH

Minerals

4B-008 These areas are available for federal oil and gas leasing with no surface occupancy stipulations to protect threatened, endangered, sensitive, and locally rare species. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on threatened, endangered, sensitive, and locally rare species.

4B-009 These areas are not available for mineral materials for commercial, personal, or free use purposes.

4B-010 Private mineral rights exist in some of these areas. Roads, wells, and other necessary infrastructure associated with these rights are allowed. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to minimize disturbance to threatened, endangered, sensitive, and locally rare species habitat.

Roads

4B-011 Roads that do not contribute to the objective of preserving the natural ecosystem and not needed for administrative purposes are closed. Normally, natural revegetation will obliterate closed roads. Other measures, such as seeding or planting, may be used if conditions warrant.

4B-012 Road construction is not normally permitted inside the area.

Lands and Special Uses

4B-013 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites or wind energy development.

4B-014 Special uses consistent with the Chief's establishment report could occur.

4C1 Geologic Areas

Two areas of the Forest are proposed for designation as a Special Area for their unique geological resources: Devils Garden on the Lee Ranger District and Rainbow Rocks on the James River Ranger District.

Emphasis:

Geologic Areas are managed to highlight and protect unique geologic resources as well as to develop public understanding of, and appreciation for, the influence of geology on the ecology and human history. Management focus is on protection and on showcasing the unique and scenic geologic resources in the Russell Fork area.

Desired Condition:

Geologic Areas provide outstanding opportunities for people to learn about the natural history of the Forest and to enjoy a wide variety of recreation opportunities in an attractive setting. Safe, barrier-free public access by road and trail is provided and designed to protect sensitive geologic resources. Sensitive karst areas are protected from human-caused detrimental hydrologic and habitat change. Recreational access through these areas may be limited in order to protect geologic resources. Where public access is unrestricted, interpretive information is available to develop understanding of the importance of protecting the geologic and biologic communities of the area.

There is low need for visitors to rely on their personal physical abilities and primitive recreation skills. Education and interpretation are strongly emphasized and school groups are encouraged to visit the sites. The sights and sounds of other visitors are evident and opportunities to encounter other visitors are moderate to high. Visitors seeking solitude may find that difficult to achieve, particularly in peak use seasons. Trails may be highly developed, including hardened trails and boardwalks to protect the resource and to provide for a high level of accessibility for persons of all abilities. Mountain biking, horseback riding, and dispersed camping are confined to designated trails and areas. Other appropriate recreational activities include hiking, bird watching, photography, hunting and fishing.

Visitors enjoy a natural appearing landscape character with outstanding or interesting geologic formations. Landscapes feature a structurally diverse older aged forest community with a continuous forested canopy, with the exception of occasional gaps created by high water tables, sinkholes, storms, insects, diseases, or fire. Infrequent pastoral and historic/cultural enclaves may also exist. Road corridor improvements and interpretive facilities are evident changes to the natural environment but these man-made alterations fit well with the character of the surrounding landscape. Commercial timber harvest is not appropriate within this prescription area. Prescribed fire, use of wildland fire, integrated pest management, and felling of trees may be used to manage vegetation. Other management activities are not evident to the average visitor and the valued character of these landscapes appears intact with no noticeable deviations.

Since there is the potential for large numbers of visitors at peak use seasons, regulations are necessary for protection of resources and visitors. Information is provided at bulletin boards, or kiosks, as well as at Forest Service visitor's centers and offices, websites and in brochures. Visitors are encouraged to practice minimum impact techniques while recreating. Trash receptacles may be provided at parking areas and high use areas. Facilities of a modern nature, located outside of sensitive karst areas, are present to provide for visitor safety and comfort and to protect resources. Facilities are designed with sensitivity to character, scale, and color, which complement the surroundings at each specific site. This could range from semi-primitive to rural. Facilities might include parking areas, trailheads, bulletin boards, interpretive kiosks, signs, restrooms, canoe/raft launches, fishing platforms, picnic sites, etc.

Natural processes will eventually result in a large patch late successional to old growth forest matrix dominated by shade tolerant hardwoods and eastern white pines throughout most of this area. Rare communities and associated species will continue to exist in the area. Insects and diseases play a major role in shaping future species composition and successional stages across these areas, however, integrated pest management favoring biological controls may be used to eradicate or suppress non-native invasive pests. Non-native vegetation occurs only as transients and is not self-perpetuating. Cavity trees, cull trees, standing dead trees, and down logs are common throughout the area as a result of natural mortality.

4C1 - Geologic Area Management Prescription Areas

Standards

Water, Soil, and Air

4C1-001 Protect sensitive karst areas from human-caused detrimental hydrologic and habitat change.

Terrestrial and Aquatic Species

4C1-002 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife may be present and maintained, but no expansion of openings or creation of new permanent openings of this type occurs. Native species are emphasized when establishing food plants for wildlife. Some openings provide permanent shrub/sapling habitat as a result of longer maintenance cycles.

Vegetation and Forest Health

4C1-003 Native forest insect and disease outbreaks are controlled only to prevent unacceptable damage to resources on adjacent land or to protect threatened, endangered, and sensitive species. Non-native invasive insects and diseases may be eradicated or suppressed. Favor biological control methods.

4C1-004 Eradicate non-native invasive vegetation when the infestations are isolated. Use hand-applied chemicals, with Forest Supervisor approval, when necessary.

4C1-005 Prescribed fire, use of wildland fire, integrated pest management, and felling of trees are allowed to:

- provide for public health and safety;
- maintain developed recreation facilities, including roads and trails;
- maintain rare communities and species dependent on disturbance;
- reduce fuel buildups; or
- control non-native invasive vegetation.

Timber Management

4C1-006 These lands are classified as unsuitable for timber production. Timber harvest is not allowed unless associated with salvage or reasonable access to valid existing rights.

4C1-007 Salvage of dead and dying trees is only allowed when there is a threat to health and safety or ecological resources.

Prescribed Fire and Unplanned Natural Ignitions Use

4C1-008 Conduct prescribed fire and wildland fire activities recognizing sensitive geologic conditions in karst areas, including ground water.

Non-timber Forest Products

4C1-009 Do not permit the collection of non-timber forest products, except for scientific purposes as permitted by the Forest Supervisor.

Recreation

4C1-010 Recreational access through these areas may be restricted in order to protect geologic resources.

4C1-011 These areas are unsuitable for designation of new ATV routes or use areas.

Scenery

4C1-012 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	H	H	H	H	H

Minerals

4C1-013 These areas are available for federal oil and gas leasing with controlled surface use to protect the geologic resources and ecological values of the area. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on geologic resources and ecological values.

4C1-014 These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed to (a) administer the area; (b) protect geologic resources and ecological values; (c) restore riparian areas and aquatic habitat; (d) control erosion and sedimentation; or (e) repair flood damage.

4C1-015 Federal oil and gas leases and private mineral rights exist. Roads, wells, and other necessary infrastructure associated with these leases and rights are allowed. Existing lease stipulations are used to minimize surface disturbances in this area. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized and reasonable access is granted. Encourage such interests to avoid rare communities and minimize surface disturbances.

Roads

4C1-016 Do not permit road construction, subject to valid existing rights and leases.

4C1-017 Road reconstruction and minor relocation are permitted after full consideration of effects on geologic resources and ecological values.

Lands and Special Uses

4C1-018 Locate new public utilities and rights-of-way to areas of this prescription area where major impacts already exist. Limit linear utilities and rights-of-way to a single crossing of the prescription area, per project.

4C1-019 Require mitigation measures including screening, feathering, and other visual management techniques to mitigate visual and other impacts of new or upgraded utility rights-of-way. Mitigation measures apply to facilities as well as vegetation.

4D Botanical - Zoological Areas (Special Biological Areas)

Biological Areas are managed to include lands that support key components and concentrations of the Forest's biological diversity. These lands serve as core areas for conservation of the most significant and rarer elements of biological diversity identified to date on the Forest. These areas or communities are assemblages of plants and animals that occupy a small portion of the landscape, but contribute significantly to biological diversity.

These areas typically include high quality ecological communities such as high elevation mountain tops, shale barrens, caves and karst features, wetlands, and diverse habitat for threatened and endangered species, sensitive and locally rare species. These lands contain individual threatened, endangered, or rare natural communities found within major forest communities.

There are currently xx Special Biological Areas that total about xxx,xxx acres.

Emphasis:

These lands serve as a network of core areas for conservation of significant elements of biological diversity. The goal of designation and management of these areas is to perpetuate or increase existing individual plant or animal species and communities that are of national, regional, or state significance and identified as threatened, endangered, sensitive, or locally rare.

Desired Condition:

Botanical-Zoological areas are managed for the following: (1) protection of threatened, endangered, sensitive, or locally rare species from human taking or human-caused detrimental habitat changes; (2) stable or increasing populations of threatened, endangered, sensitive, or locally rare species; and (3) functioning ecosystems.

The natural evolving or natural appearing landscape character of these areas exhibits a variety of forested and non-forested communities frequently associated with disturbance like fire. Late successional to old growth forest communities may exist in some of these areas and additional acres will develop in future years. Ideally, natural processes within these areas proceed unencumbered. Examples of these conditions include fire suppression, adjacent human development, and influx of non-native species.

Prescribed fire, wildlife habitat improvements, domestic livestock grazing, integrated pest management, and occasional low intensity timber harvest are appropriate management tools to maintain the long-term goals of the desired condition in these areas related to the improvement of threatened, endangered, sensitive, and locally rare species habitat. Specific management activities necessary to maintain, restore, or enhance threatened, endangered, sensitive, and locally rare species for each special biological area are described in the Virginia Department of Conservation and Recreation, Division of Natural Heritage, Reports of Special Biological Areas and other pertinent biological reference material.

These management activities will result in a forest successional stage appropriate for maintaining the threatened, endangered, sensitive, and locally rare species. All areas are protected from human-caused detrimental habitat change, the taking of threatened or endangered species, and the collection of living plants or animals unless such collections are used for achieving the stated management goals. Recreational access through these areas may be limited in order to protect natural heritage resources. Where public access is unrestricted, interpretive information is available to develop understanding of the importance of protecting the plant and animal communities of the area.

Access to these areas may be limited. New roads are managed as closed. New trail sections to link existing trails or for education and interpretation are considered on a case-by-case basis. Recreation opportunities are limited to interpretation, bird watching, wildlife viewing, nature photography, and hiking on non-motorized, non-mechanized foot trails.

Some of these special biological areas lie within the foreground of the Appalachian National Scenic Trail. Within the foreground of the Appalachian Trail, management practices are designed to achieve the desired condition of this management prescription as well as protect the Appalachian Trail experience, strengthen the role of volunteers and volunteer organizations, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Appalachian Trail passes.

These sites can be nominated for placement on State registries of natural areas. These voluntary agreements recognize the protection and management of natural areas that support rare species and

significant natural communities.

4D - Botanical - Zoological Areas

Standards – Note: we included some of the 9F Rare Communities standards from the Jefferson Forest Plan, but didn't rename them as 4D

General

4D-001 In cooperation with the States' Natural Heritage agencies, make appropriate adjustments to 4D Special Biological Areas through the Forest Plan amendment process as new information becomes available.

Terrestrial and Aquatic Species

4D-002 Wildlife habitat improvements may be created, maintained, or enlarged if compatible with the habitat needs of the threatened, endangered, sensitive, and locally rare species. Only native species are used when establishing food plants for wildlife. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

9F-003 Existing openings or old fields are only maintained or created if they are compatible with the rare community.

9F-004 Control measures such as exclosures or trapping may be used where animal populations are adversely affecting rare communities.

9F-005 Beaver ponds and associated wetlands are managed in association with threatened, endangered, sensitive, and locally rare species. They are protected as rare communities when they support significant populations of these species or otherwise on a case-by-case basis. Other beaver populations and dams may be managed to: prevent adverse effects to public safety; roads, trails, and other facilities; private land resources; and other rare communities. Where protection of beaver ponds and associated wetlands are in conflict with other resource needs, decisions consider the beavers' role in natural processes and are based on the relative rarity of the communities and associated species involved, with the rarest elements receiving priority.

Rare Communities and Old Growth

4D-003 Large, medium, and small patches of old growth are retained if compatible with the habitat needs of the threatened, endangered, sensitive, and locally rare species.

Vegetation and Forest Health

4D-004 Native forest insect and disease outbreaks are controlled only to prevent unacceptable damage to resources on adjacent land or to protect threatened, endangered, sensitive, or locally rare species. Non-native, invasive insects and diseases may be eradicated or suppressed to prevent a loss of the special biological community. Favor biological control methods.

4D-005 Eradicate non-native invasive plants when the infestations are isolated. Use hand-applied chemicals, with Forest Supervisor approval, when necessary.

4D-006 Vegetation management is allowed when compatible with the habitat needs of the threatened, endangered, sensitive, and locally rare species. Allow vegetation management activities to:

- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Restore, enhance, or mimic historic fire regimes;
- Maintain, enhance or restore the diversity and complexity of native vegetation;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation; or
- Provide for public safety and trail maintenance.

9F-008 Control non-native invasive species (plants, animals, insects, and diseases) where they are causing negative effects to rare communities. Do not introduce non-native species in or near rare communities, unless it is a natural enemy of an non-native pest.

9F-009 Allow native insects and diseases to play their natural ecological role if it does not pose a threat to the resource(s) for which the area was created.

9F-010 Removal of dead and down logs or other woody debris in rare communities is prohibited. Where needed to ensure public or employee safety, snags may be felled, but will be retained within the community as downed wood.

Timber Management

4D-007 These lands are classified as unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

4D-XXX **NEW STANDARD**: Salvage of dead and dying trees is only allowed if the biologic resource for which the area was established is not impaired by the salvage operation.

Non-timber Forest Products

4D-008 Do not permit the collection of non-timber forest products, except for scientific purposes as permitted by the Forest Supervisor.

Prescribed Fire and Unplanned Natural Ignitions Use

4D-009 Vegetation management may be accomplished with management-ignited prescribed fire, unplanned natural ignition use, and mechanical treatments as an appropriate method of reducing costs associated with these activities.

9F-007 Prohibit new plow lines for containing prescribed burns in or near bogs and seasonal ponds to avoid disrupting hydrology. Use existing roads, firelines, or streams to contain the burn where possible. Where necessary, construct new firelines by less intensive methods such as wetline and cutting back flashy fuels. Handline may be used when it is the only option available.

9F-016 Do not construct fire lines with heavy mechanized equipment (e.g. bulldozers and tractors) in rare communities when preparing for prescribed fire, unless necessary to benefit or enhance the rare community (e.g. table mountain pine community).

9F-017 Basic mesic forests are excluded from prescribed burning blocks where this can be accomplished without large increases in fireline construction. When necessary to include mesic deciduous forests within burning blocks, direct firing will not be done within these

communities unless necessary to secure control lines. In these cases, only low intensity fires are allowed.

9F-015 Firelines constructed with heavy equipment are avoided whenever possible during wildland fire suppression.

Recreation

4D-010 Where recreational uses are negatively affecting threatened, endangered, sensitive, and locally rare species, modify recreation sites or trails to reduce or eliminate negative effects. New and improved recreational developments are designed to avoid adverse effects to threatened, endangered, sensitive, and locally rare species.

4D-011 These areas are unsuitable for designation of new OHV routes or ATV use areas, unless crossing the area is the only feasible alternative or results in less environmental impact.

Appalachian National Scenic Trail

4D-012 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

4D-013 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

Minerals

4D-014 These areas are available for federal oil and gas leasing with controlled surface use to protect threatened, endangered, sensitive, and locally rare species. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on threatened, endangered, sensitive, and locally rare species.

4D-015 Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect threatened, endangered, sensitive, and locally rare species habitat.

4D-016 Federal oil and gas leases exist in some of these areas. Roads, wells, and other necessary infrastructure associated with these leases are allowed. Existing lease stipulations are used to minimize disturbance to threatened, endangered, sensitive, and locally rare species habitat.

4D-017 Private mineral rights exist in some of these areas. Roads, wells, and other necessary infrastructure associated with these rights are allowed. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to minimize disturbance to threatened, endangered, sensitive, and locally rare species habitat.

Roads

4D-019 Density of open roads remains near the current level throughout the planning period, with only small increases or decreases.

9F-027 Only permit road construction to access valid existing rights and mineral leases, or if entering the rare community to access an adjacent area results in less environmental impact. Road reconstruction and minor relocation are permitted after full consideration of effects on the rare community and associated species.

9F-028 New roads are engineered to minimize impacts to the rare community and managed as closed to public motorized travel.

Lands and Special Uses

4D-020 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, communication sites **ADDITION: or wind energy development**. Existing uses may continue unless removal is necessary to protect threatened, endangered, sensitive, and locally rare species.

9F-030 Allow commercial use by outfitters and guides if compatible with preservation of the rare community values. Do not allow contest events such as foot races or horseback endurance events. Require outfitters and guides to use leave-no-trace techniques. Do not allow permanent camps.

9F-031 Limit the size of commercial and organized groups to 10.

4E CULTURAL/HERITAGE AREAS

Twelve historic sites are identified as Special Area-Historic. These areas are: Confederate Breastworks, Callie Furnace, Catherine Furnace, Capon Furnace, Van Buren Furnace, Mount Torry Furnace, Wallace House, High Knob Tower, Hematite Mining Community, Signal Knob, Zepp Tannery site, and Warwick Mansion. Historic sites are non-renewable resources designated by federal laws to be antiquities in excess of 50 years in age that can be found on or within National Forest System lands.

Emphasis:

Cultural/Heritage Areas are managed to highlight and protect unique historic resources as well as to develop public understanding of, and appreciation for, the influence of human history on the forest ecosystem. Sites are preserved and protected as appropriate in accordance with the law. Management focus is providing public access and education.

Desired Condition:

Cultural/Heritage Areas provide outstanding opportunities for people to learn about the cultural history of the Forest and to enjoy a wide variety of recreation opportunities in an attractive setting. Safe, barrier-free public access by both roads and trails is provided and designed to protect sensitive historic resources. Sensitive resources and areas are protected from human-caused damage. Recreational access through parts of these areas may be limited in order to protect historic resources. Where public access is unrestricted, interpretive information is available to develop understanding of the importance of protecting the historic and biologic communities of the area. Interpretive materials and services are high quality and effectively communicate the influence of people on the forest ecosystem. Site-specific management plans are prepared for these areas covering site interpretation; cultural/historic resource protection; vegetation, fire, and wildlife management, and other resource

uses.

There is low need for visitors to rely on their personal physical abilities and primitive recreation skills. Education and interpretation are strongly emphasized and school groups are encouraged to visit the sites. The sights and sounds of other visitors are evident and opportunities to encounter other visitors are moderate to high. Visitors seeking solitude may find that difficult to achieve, particularly in peak use seasons. Trails may be highly developed, including hardened trails and boardwalks to protect the resource and to provide for a high level of accessibility for persons of all abilities. Mountain biking, horseback riding, and dispersed camping may be confined to designated trails and areas. Other appropriate recreational activities include hiking, bird watching, photography, hunting and fishing.

Visitors enjoy a variety of forested and non-forested communities, with outstanding and interesting historic features. The landscape character is typically historic, pastoral, or cultural often showing a great deal of human influence, surrounded by a natural appearing backdrop. Late successional to old growth forest communities occur in some of these areas and additional acres may be allowed to develop in future years if consistent with the historic character of the area.

Some of these cultural/heritage areas lie within the foreground of the Appalachian National Scenic Trail. Within the foreground of the Appalachian Trail, management practices are designed to achieve the desired condition of this management prescription as well as protect the Appalachian Trail experience, strengthen the role of volunteers and volunteer organizations, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Appalachian Trail passes.

Since there is the potential for large numbers of visitors at peak use seasons, regulations are necessary for protection of resources and visitors. Information is provided at bulletin boards or kiosks, as well as at Forest Service visitor's centers and in brochures. Visitors are encouraged to practice minimum impact techniques while recreating. Trash receptacles may be provided at parking areas and high use areas. Modern facilities that fit with the historic character of the area are present to provide for visitor safety and comfort and to protect resources. Facilities are designed with sensitivity to character, scale, and color, which complement the surroundings at each specific site. This could range from semi-primitive to rural. Facilities might include parking areas, trailheads, bulletin boards, interpretive kiosks, signs, restrooms, canoe/raft launches, fishing platforms, picnic sites, etc.

These areas are characterized by a full range of forest successional stages from early to mid to late. Early-successional forest conditions may be created both naturally when compatible with the cultural and historic objectives of the area. Vegetation is influenced both by natural processes and humans. Low intensity timber harvest, prescribed fire, wildlife habitat improvements, and integrated pest management are appropriate management tools to maintain the long-term goals of the desired condition related to education and interpretation of the historic uses of these areas. Wildland fires are suppressed using an appropriate management response to protect heritage resources.

4E - Cultural/Heritage Areas

Standards

General

4E-001 All management activities within these areas must be compatible with the protection and interpretation of cultural/historic resources.

Water, Soil, and Air

4E-002 Watershed restoration work is scheduled considering protection of historic values and resource elements.

Terrestrial and Aquatic Species

~~4E-003 Provide up to four percent of forested land in early successional habitat conditions in the Lignite and Fenwick Mines areas.~~ This is not applicable to the GWNF.

4E-004 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Rare Communities and Old Growth

4E-005 Large, medium, and small old growth patches are maintained within these areas when consistent with the historic character of the area.

Vegetation and Forest Health

4E-006 Control insect and disease outbreaks when necessary to protect the cultural/historic values, to reduce hazards to visitors, or for safety or legal reasons. Eradicate recently established non-native pests when possible. Favor the most effective control method.

4E-007 Non-native species may be planted for watershed restoration purposes.

4E-008 Allow vegetation management activities to:

- Restore or maintain historic vegetative communities appropriate to the time period being emphasized;
- Demonstrate historic and present day logging systems;
- Enhance or rehabilitate scenery;
- Maintain recreation facilities, including roads and trails;
- Enhance both game and non-game wildlife habitat;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation;
- Reduce fuel buildups; or
- Provide for public health and safety.

Timber Management

4E-009 ~~The Lignite and Fenwick Mines areas on the New Castle Ranger District are suitable for timber production.~~ This is not applicable to the GWNF.

4E-010 These areas are unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

4E-011 ~~Within the Lignite and Fenwick Mines areas, timber harvest practices are modified to recognize and interpret the cultural, historic, aesthetic and recreational values of these lands.~~ This is not applicable to the GWNF.

4E-012 ~~All even and uneven aged silvicultural systems are allowed. The systems used will be based on the vegetation management objective.~~ This is not applicable to the GWNF.

4E-013 ~~Manage regeneration harvest areas with the following rotation ages:~~ This is not applicable to the GWNF.

Non-timber Forest Products

4E–014 Do not permit the collection of living plants or animals, and artifacts unless such collections are for the purpose of achieving the stated management goals.

Wildland Fire Suppression

4E-015 A full range of suppression strategies are employed to protect cultural/historic resources.

Prescribed Fire and Unplanned Natural Ignitions Use

4E-016 Vegetation management may be accomplished with management-ignited prescribed fire and mechanical treatments as an appropriate method of reducing costs associated with these activities.

4E-017 Areas where heavy equipment fireline construction is prohibited are designated through the site plan for the area.

Recreation

4E-018 Recreational access through these areas may be restricted in order to protect historic and cultural resources.

Appalachian National Scenic Trail

4D-019 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

4E-020 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	H	M	M	M	M

4E-021 Facilities and management activities emphasize the historic landscape character.

Minerals

4E-022 These areas are available for federal oil and gas leasing with no surface occupancy to protect the cultural/historic resources and values.. Other Federal minerals may be available on a case-by-case basis.

4E-023 These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed.

Lands and Special Uses

4E-024 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, communication sites **ADDITION: and wind generation**. Continue existing uses. Require a

landscape management plan with screening, feathering, and other vegetation management techniques to mitigate the visual and other impacts of new, upgraded, or reauthorized utility corridors or communication sites.

4F - Mount Pleasant Natural Scenic Area Management Prescription Area

Emphasis:

The 7,695-acre Mount Pleasant National Scenic Area was designated by the U.S. Congress in 1994. The purposes of the George Washington National Forest Mount Pleasant Scenic Area Act are to:

- Ensure appropriate protection and preservation of the area's scenic quality, water quality, natural characteristics, and water resources;
- Protect and manage vegetation to provide wildlife and fish habitat consistent with paragraph (1);
- Provide areas that may develop characteristics of old-growth forests; and
- Provide a variety of recreation opportunities that are consistent with the preceding purposes.

The Mount Pleasant National Scenic Area is well known for its prominent mountains, including Mount Pleasant, Pompey, and Cold Mountain, as well as the very popular Henry Lanum Memorial Trail, the Mount Pleasant Spur Trail, the Old Hotel Trail, and a portion of the Appalachian National Scenic Trail. Some of the best views on the Pedlar Ranger District are possible from Mount Pleasant and Cold Mountain.

The Congressional Act provides direction on what activities can occur and how they can occur within the Mount Pleasant National Scenic Area. The standards that follow mimic the Act. If differences in interpretation arise, the language in the Act governs *(16 U.S.C 545(b)(1))*.

Desired Condition:

The Mount Pleasant National Scenic Area offers a variety of recreational experiences that are in harmony with protecting unique biological and primitive recreation opportunities. This area is very popular for various forms of non-motorized dispersed recreation including hiking, hunting, horseback riding, and fishing.

The Mount Pleasant National Scenic Area offers excellent opportunities for solitude and serenity. The core of the Mount Pleasant National Scenic Area appears relatively remote.

As the vegetation within the Mount Pleasant National Scenic Area continues to age, there is natural mortality. Most of the Mount Pleasant National Scenic Area develops characteristics of older ecosystems.

Wildlife habitat conditions are similar to those found in Remote Backcountry areas.

4F - Mount Pleasant Natural Scenic Area Management Prescription Area

Standards

Terrestrial and Aquatic Species

4F-001 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife may be present and maintained, but no expansion of openings or creation of new permanent openings of this type occurs.

Vegetation and Forest Health

4F-002 Vegetation manipulation may be practiced for the maintenance of existing wildlife clearings and visual quality.

4F-003 Insect and disease outbreaks may be controlled to maintain scenic quality, prevent tree mortality, reduce hazards to visitors, or protect private lands.

Timber Management

4F-003 These lands are classified as unsuitable for timber production. No timber harvest shall be allowed, except as may be necessary in the control of fire, insects, and diseases; or to provide for public safety and trail access.

Non-timber Forest Products

4F-004 Harvesting of firewood for personal use is permitted along perimeter roads.

Prescribed Fire and Unplanned Natural Ignitions Use

4F-005 Prescribed fire may be used to manage the vegetation of existing wildlife clearings, provide wildlife habitat, or open areas in association with the Appalachian National Scenic Trail.

Recreation

4F-006 For management of lands along the Appalachian Trail, follow the standards listed under Management Area 4A of this Revised Forest Plan. Where conflicts occur between management of the Appalachian Trail and provisions of the Mount Pleasant Scenic Area Act, follow the provisions of the Act.

Scenery

4F-007 Management activities are designed to meet or exceed a high Scenic Integrity Objective.

Minerals

4F-008 All federally-owned lands in the Mount Pleasant National Scenic Area are withdrawn from location, entry, and patent under the mining laws of the United States, and from leasing claims under the mineral and geothermal leasing laws of the United States, including amendments to such laws.

Roads

4F-009 No new permanent roads shall be constructed, except that this prohibition shall not be construed to deny access to private lands or interests therein in the Scenic Area.

4F-010 Motorized travel in the Scenic Area shall be allowed on State Route 635 and Forest Development Road 51. Except as listed above, motorized travel shall not be permitted within or on the boundary of the Scenic Area except as necessary for administrative use in furtherance of the purposes of the George Washington National Forest Mount Pleasant Scenic Area Act of August 26, 1994 (PL 103-314).

4F-011 Any abandoned or closed roads are revegetated for resource protection.

Lands and Special Uses

4F-012 NEW STANDARD: This area is unsuitable for designation of wind energy development.

5A ADMINISTRATIVE SITES

Emphasis:

Sites include work centers, lookout towers, and Forest Service owned houses and offices. Sites are managed to serve/support resource programs and are maintained to protect capital investment.

Desired Condition:

Provide administrative sites and facilities that effectively and safely serve the public and accommodate the workforce. Administrative sites are readily accessed by road, although some are accessed by trails. The facilities should have barrier-free access.

The landscape character could range from natural appearing to urban/cultural. These areas are classified as unsuited for timber production.

Forest Service offices and/or visitor centers provide educational and/or interpretive opportunities such as exhibits and displays, books, videos and brochures. Where feasible and appropriate, short hiking trails are provided in association with office visitor centers. Lookout towers provide opportunities for viewing scenery on a grand scale. Hunting and fishing are generally not allowed at administrative sites.

Some of these administrative sites lie within the foreground of the Appalachian National Scenic Trail. Within the foreground of the Appalachian Trail, management practices are designed to achieve the desired condition of this management prescription as well as protect the Appalachian Trail experience, strengthen the role of volunteers and volunteer organizations, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Appalachian Trail passes.

5A - Administrative Sites

Standards

Vegetation and Forest Health

5A-001 Aggressively control forest insects, diseases, and non-native invasive plants using the most effective control method. Salvage is allowed.

Appalachian National Scenic Trail

5A-002 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

5A-003 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	M	M	M	M	M

Minerals

5A-004 This area is not available for commercial or personal use of mineral materials. Administrative and free use of mineral materials is allowed.

Other Guideline Sources

OSHA regulations, Health and Safety Code Handbook requirements, and all local, state, and building codes should be complied with.

5B DESIGNATED COMMUNICATION SITES

Emphasis:

These designated sites contain special uses which serve a public benefit by providing a reliable communication network essential to local, regional, and national economies and security. These sites include ridgetop towers and other related facilities. These designated sites are managed to minimize adverse impacts on other resources.

Desired Condition:

Existing special use authorizations for communications continue within these designated sites. Each site is developed and utilized to its greatest potential in order to reduce the need to develop additional sites. Where possible, existing sites are expanded as needed rather than creating additional areas. All users' equipment are compatible with forest surroundings and others users' equipment and frequencies. New equipment should be as inconspicuous to the surrounding terrain as possible. Special use authorizations are issued.

Vegetation consists predominantly of low grasses and wildflowers with some native deciduous and evergreen shrubs. For the most part the areas are on gently rolling terrain, some with exposed surface rock, rock outcrops, and meandering streams.

The protection of rare communities and species associates is provided, along with protection measures for population occurrences for threatened, endangered, sensitive, and locally rare species. This will provide a high likelihood that species within these associations will continue to persist on National Forest System lands.

The landscape character is cultural/urban. Scenery management techniques are used to mitigate adverse impacts. Utilizing existing and proposed towers to accommodate as many users as possible (within technical constraints) reduces tower clutter. These sites are non-forested, benefiting wildlife species, which favor grass, shrubs, old fields, and forest edges. These areas are managed to retain low growing vegetation which conforms to the safe operating requirements of the communication use and which reduce surface water runoff and erosion. Recreation is not emphasized or encouraged at these sites, although some of these sites are located within the foreground of the Appalachian National Scenic Trail.

5B - Designated Communication Sites

Standards

General

5B-001 Communications towers no longer in use or determined to be obsolete are removed by the holder of the special use authorization within 18 months of cessation of use.

Threatened, Endangered and Sensitive Species

~~5B-002 Within the Peaks of Otter salamander habitat conservation area, activities must comply with the Habitat Conservation Agreement for Peaks of Otter salamander. See Management prescription 8E2 for Peaks of Otter salamander habitat conservation management direction.~~ Not applicable on the GWNF.

Vegetation and Forest Health

5B-003 Aggressively control non-native, invasive plant species within these areas.

Appalachian National Scenic Trail

5B-004 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

5B-005 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	M	M	L	L	L	L	L

5C DESIGNATED UTILITY CORRIDORS

This management prescription is allocated to approximately xx acres (1%) across the Forest.

Emphasis:

These designated corridors contain special uses which serve a public benefit by providing a reliable supply of electricity, natural gas, or water essential to local, regional, and national economies. They include long linear features like high voltage electric transmission lines and buried pipelines for public

drinking water or natural gas. These designated corridors serve uses that require at least a 50 feet wide right-of-way. Local distribution lines are not included in this prescription area, but rather are part of the prescription area in which they are physically located.

Desired Condition:

Existing linear special use authorizations for transmission lines and pipelines for water and natural gas will continue within these designated corridors. Rights-of-way for uses within designated utility corridors are authorized by special use permit or easement. Where possible, existing corridors are expanded as needed rather than creating additional areas. Compatible multiple uses are encouraged, including co-location of communication uses on existing electric transmission towers.

Vegetation consists predominantly of low grasses, wildflowers with some native deciduous and evergreen shrubs, low-growing trees like dogwood and redbud, and young, sapling-sized trees.

The protection of rare communities and species associates is provided, along with the protection measures for population occurrences for threatened, endangered, sensitive, and locally rare species. This will provide a high likelihood that species within these associations will continue to persist on National Forest System lands.

Utility corridors are prime areas for viewing wildlife species that favor grass, shrubs, old fields, and forest edges. These areas are managed to retain low growing vegetation which conforms to the safe operating requirements of the utility and which reduce surface water runoff and erosion. Recreation use is generally hunting-related, although existing trail systems often cross these corridors. Some of these corridors are located within the foreground of the Appalachian National Scenic Trail. The landscape character could range from natural appearing to pastoral/cultural. Scenery management techniques are used to mitigate adverse impacts. These lands are predominately non-forest and therefore classified as unsuitable for timber production.

5C - Designated Utility Corridors

Standards

Vegetation and Forest Health

5C-001 Aggressively control non-native, invasive plant species within these corridors.

Appalachian National Scenic Trail

5C-002 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

5C-003 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	M	M	L	L	L	L	L

7A1 - HIGHLANDS SCENIC BYWAY MANAGEMENT PRESCRIPTION AREA

The Highlands Scenic Byway is a 19.6-mile loop designated by the Chief of the Forest Service. It is located in Alleghany and Rockbridge Counties and includes segments of State Route 850, State Route 770 and National Forest System Road 447. The area visible during leaf-off for up to 1/2 mile from either side of the road defines the byway corridor.

From the dense forested stream valleys of Brattons Run and Simpson Creek to the upland hardwood forest on the ridge of North Mountain, the Highlands Scenic Drive weaves through scenery which consists primarily of a continuous cover of forest. There are views to impressive geologic formations on the upper slopes as well as beautiful cascading streams in narrow valleys. There are numerous remnants of a once thriving mining community, including building foundations and a narrow gauge railroad grade.

There is a modest interpretive facility, trailhead and short loop trails along Simpson Creek. Other short interpretive trails are located along the Highlands Scenic Tour route. At least three overlooks with parking are located along the ridge of North Mountain.

This area involves approximately xx,xxx acres across the George Washington National Forest.

Emphasis:

The Highlands Scenic Byway showcases the natural scenery, forest vegetation, cultural and geologic resources, and Forest Service management of these resources that were the basis for the scenic byway designation.

Desired Condition:

Vegetation is influenced both by natural processes and humans. Biological communities are maintained or improved to provide an attractive setting for visitors, while providing for the protection of rare communities and threatened, endangered, sensitive or locally rare species. Forest management activities maintain the natural characteristics that make the area scenic. Up to xx percent of forested land may be in early-successional forest conditions created both naturally and purposefully to create visually diverse vegetation stages and provide opportunities to interpret management activities. Low intensity commercial timber harvest is appropriate to maintain the long-term goals of a diverse and vigorous forest.

This area is characterized by a predominance of mid- and late-successional forests with a high to intermediate tolerance to shade. Forest structure varies according to ecological factors, but largely consists of a mature overstory of hardwoods, occasionally mixed with pines, a fairly open midstory, and a well-developed herbaceous and shrubby understory. Even- and uneven-aged forest communities are managed throughout the area, along with continued development of small and medium patches of late-successional and old growth forest communities.

Road corridor improvements and facilities are evident changes to the natural environment. These components of a scenic byway and other man-made alterations fit well with the character of the surrounding landscape. Facilities include but are not limited to parking areas or pull-outs, trails or trailheads, buildings, viewing areas, and signs. Routes are signed to advise drivers of oversized vehicles and which routes are appropriate and safe for their use.

Interpretation of forest management activities has been a theme of the byway since its designation. Interpretive signs inform visitors of past and present management activities and their benefits, such as wildlife habitat improvements, stream structures, protection of heritage resources, and commercial timber harvesting.

The Tour is routed along paved and improved roads designed for motorcycles, cars, mini-vans and pick-up trucks. Turn-around areas are provided for oversized vehicles. The road is safe and the ride comfortable.

The potential for encounters with other Forest visitors is moderate to high, especially at byway facilities. There are no opportunities for people seeking solitude in remote locations. There is low risk and little need for visitors to rely on personal physical abilities or primitive outdoor recreation skills.

Standards

Terrestrial and Aquatic Species

7A1-001 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife may be present and maintained, but no expansion of openings or creation of new permanent openings of this type occurs. Expansion of existing openings and/or creation of new openings may occur, when compatible with the scenic objectives.

Vegetation and Forest Health

7A1-002 In the foreground of the Byway, Vegetation within the visual road corridor is managed to enhance landscape scenery and to ensure public safety.

7A1-003 Control insect and disease outbreaks, when necessary, to protect the scenic values, to reduce hazards to visitors, or for safety or legal reasons. Eradicate recently established non-native pests when possible. Favor the most effective control method.

Timber Management

7A1-004 In the foreground of the Byway, timber harvesting and other management practices may be employed to achieve the objectives of the Highlands Scenic Tour, such as interpretation of resource management including demonstrating harvest echniques. These practices meet a Scenic Integrity Objective of High and are designed to blend with the landscape.

7A1-005 In the middleground of the Byway, a variety of silvicultural practices that demonstrate and interpret forest management practices are employed to meet the desired future condition of this management area. All timber harvest methods are allowed provided they meet the visual quality objective of partial retention. Ground-based timber harvesting is restricted to slopes less than 35 percent. Cable harvesting systems are not limited to slope.

7A1-006 Salvage is allowed for scenic rehabilitation, fuel reduction, and to capture the economic value of dead, dying and diseased trees.

Scenery

7A1-007 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	M	M	M	M	M

Minerals

7A1-008 These areas are available for federal oil and gas leasing with controlled surface use to protect scenic values. Other Federal minerals, including mineral materials, may be available on a case-by-case basis after full consideration of effects on the scenic resources.

Roads

7A1-009 Other than the Tour route itself, only Traffic Service Level (TSL) D roads may be constructed, which are closed to public use.

Lands and Special Uses

7A1-010 These areas are suitable for new utility structures, such as new transmission, gas, or water lines, only in the location with the least impacts to scenic integrity.

7A1-011 Issue non-recreational special-use authorizations only where there is a demonstrated public need or benefit and where no other reasonable alternatives exist.

7B Scenic Corridors

High quality scenery is provided in sensitive recreational and travelway settings. Examples include areas adjacent to "gateway" communities, areas around lakes, rivers, and "backdrop" areas viewed from major travelways and State-designated byways. The area visible during leaf-off for up to 1/2 mile from either side of the road typically defines the corridor. It also includes the visible middleground of the west face of Massanutten Mountain (a narrow strip) as seen from the Shenandoah Valley along Interstate 81. The scenic qualities of the landscape in these areas are maintained and their desired condition is described as follows:

Table x.
Sensitive recreational and travelways

Interstate 64	State Highway 311
	State Highway 55
Amtrak Railroad Line	State Highway 130
US Highway 60	State Highway 39
US Highway 250	State Highway 42
US Highway 33	State Highway 924
US Highway 211	State Highway 850
US Highway 220	State Highway 770
US Highway 501	State Highway 605
State Highway 259	State Highway 629 south of Douthat State Park
Interstate 81	Forest Development Road 447
State Highway 718	Forest Development Road 125
State Highway 606	Forest Development Road 274
State Highway 687	Monongahela NF Forest Development Road 106
State Highway 56	State Highway 629 north of Douthat State Park

Emphasis:

The emphasis is on providing, through maintenance or restoration and design, high quality scenery in

sensitive recreational and travelway settings. Examples include areas adjacent to "gateway" communities, areas around lakes, rivers, and "backdrop" areas viewed from State-designated byways and major travelways.

Desired Condition:

These areas are characterized by high quality scenery in a setting conducive to a variety of recreational experiences. Human modifications are subordinate to the characteristic landscape. Landscape restoration and rehabilitation to meet high quality scenic conditions are a high priority. Coordination with nearby communities will help provide complementary management of adjoining lands.

The area provides exceptional opportunities for motorized recreation, especially scenic driving. The views along the corridors are natural appearing and include a variety of landscape characters, ranging from natural appearing to pastoral and historic/cultural, providing colorful accents and interesting textures, which change with the season. Visitors enjoy viewing wildlife in the occasional openings and meadows scattered throughout the forest. Water, geographic features, and cultural landscapes such as hay fields, grazing livestock, and the occasional rustic cabin provide scenic diversions to the predominately forested landscape. Road corridor improvements and interpretive facilities are evident changes to the natural environment, but these man-made alterations fit well with the character of the surrounding landscape. Other management activities are not evident to the average visitor.

The prescription area is easily accessed. Maintaining a good road surface and providing informational signs for protection of the natural and cultural resources as well as the safety and comfort of visitors minimize impacts of visitors within the prescription area.

Hiking, mountain biking, and horse trails are present throughout the prescription area. OHV trails may be present, but new trails are not constructed except where desired to link existing trail systems. In addition to enjoying the scenery and using various trails, visitors may engage in photography, wildlife viewing, hunting, and fishing. Facilities are designed to harmonize with the desired landscape setting. Facilities might include roads, pullouts, overlooks, parking areas, trailheads, bulletin boards, interpretive kiosks, rail fences, signs, restrooms, and picnic sites. Trails through this area are well-marked and may include features for visitors with special access needs, loop systems, and/or interpretive programs.

The sights and sounds of other visitors and motorized vehicles may be present. The opportunity to encounter other visitors is high along roadways, at parking areas, pullouts, and overlooks, but may be moderate to low on trails away from congregated use areas. At points of highly developed recreational use, visitors take on low risk and are not challenged to rely on their own physical abilities and outdoor skills. Once away from the more developed areas, opportunities for solitude are available. In these more remote areas, visitors may take on some risk and be challenged to rely on their own personal physical abilities and primitive recreational skills such as bouldering, climbing, stream fording, and orienteering.

Vegetation is influenced both by natural processes and humans. Biological communities are maintained or improved to provide an attractive setting for visitors, while providing for the protection of rare communities and threatened, endangered, sensitive, and locally rare species. Forest management activities maintain the natural characteristics that make the area scenic. Up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully to create visually diverse vegetation stages compatible with scenic values. Low intensity commercial timber harvest is appropriate to maintain the long-term goals of a diverse and vigorous forest with sensitivity to dispersed recreation and scenic values. Relatively longer rotation ages and a lower percentage of early successional forest in these areas reflect a “low intensity” approach to vegetation management and the higher priority of recreation and scenic values. Timber harvesting operations focus on what is retained in the stand, not on wood fiber production. Timber harvest practices are visually subordinate to the surrounding landscape. In the foreground of these areas, management activities are rarely evident to the casual observer.

These areas are characterized by a predominance of mid- and late-successional forests with a high to intermediate tolerance to shade. Forest structure varies according to ecological factors, but largely consists of a mature overstory of hardwoods, occasionally mixed with pines, a fairly open midstory, and a well-developed herbaceous and shrubby understory. Understory vegetation includes a variety of native deciduous and evergreen flowering trees, shrubs and wildflowers. Even- and uneven-aged forest communities are managed throughout the area, along with continued development of medium and small patches of late successional to old growth forest communities.

Wildlife species associated with mid- to late-successional deciduous forest habitats that are expected to inhabit this area include: hooded warbler, southern pigmy shrew; whip-poor-will; least weasel, downy woodpecker; eastern gray squirrel; and orchard oriole. This management prescription also provides suitable habitat for eastern wild turkey. Wildlife viewing opportunities are maintained and expanded through livestock grazing, cultivation, mowing, and burning of openings and pastoral areas.

7B - Scenic Corridors

Standards

Terrestrial and Aquatic Species

7B-001 Wildlife and fisheries habitat improvements are allowed to enhance wildlife viewing, hunting, and fishing opportunities in accordance with scenic integrity objectives. Watchable wildlife species habitat improvements are encouraged.

7B-002 Existing old fields, pastoral areas, and wildlife openings may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Rare Communities and Old Growth

7B-003 Old growth patches of all sizes and community types are maintained and restored.

7B-004 Interpretation of rare communities is encouraged when carefully controlled to promote understanding and stewardship.

Vegetation and Forest Health

7B-005 Forest structure is managed to favor flowering trees and shrubs.

7B-006 Control insect and disease outbreaks, when necessary, to protect the scenic values, to reduce hazards to visitors, or for safety or legal reasons. Eradicate recently established non-native pests when possible. Favor the most effective control method.

7B-007 Allow vegetation management activities to:

- ▶ Enhance or rehabilitate scenery, including:
  - Create aesthetically desired stand structure and species composition including a pleasing mosaic of tree species of various densities and stem sizes, park-like effects, and enhancement of fall color species;
  - Feature flowering trees, character trees, and shrub species;
  - Maintain open areas, old field habitats, pastoral settings, and vistas that enhance the scenic qualities of the corridor;
- ▶ Maintain developed recreation facilities, including roads and trails;

- Enhance both game and non-game wildlife habitat;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce fuel buildups;
- Minimize impacts from insect or disease outbreaks and rehabilitate damaged areas;
- Control non-native invasive vegetation; or
- Provide for public health and safety.

7B-008 ~~Salvage is allowed for scenic rehabilitation, fuel reduction, and to capture the economic value of dead, dying and diseased trees.~~ **MODIFICATION:** Salvage of dead, dying and damaged trees using ground based or helicopter logging can occur in scenic corridors and viewsheds to provide for scenic rehabilitation and public safety.

Timber Management

7B-009 These areas are classified as suitable for timber production. Timber harvest practices are modified to recognize and enhance the aesthetic and recreational values of these lands.

7B-010 Group selection, individual tree selection, thinning, and shelterwood harvests are predominately used.

7B-011 Clearcutting may only be used to open up vistas, create spatial diversity along travelways, decrease straight line effect of cleared utility corridors, create watchable wildlife openings, for insect and disease suppression, or for scenic rehabilitation.

7B-012 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	120-180
Cove hardwoods	120-180
White pine	80-100
Yellow pine	80-100
Scarlet oak/Black oak	80-100

Prescribed Fire and Unplanned Natural Ignitions Use

7B-013 Vegetation management may be accomplished with management-ignited prescribed fire, unplanned natural ignition use, and mechanical treatments as an appropriate method of reducing costs associated with these activities.

Recreation

7B-014 Interpretive services including trails, signs, viewing areas, self-guided programs, and buildings may be provided to enhance the understanding of, and appreciation for the natural environment, and cultural resources.

7B-015 Larger scale public use facilities, such as public information centers and administrative headquarters are allowed with structures properly landscaped.

7B-016 OHV trailheads and routes that quickly leave the seen area may be designated.

Scenery

7B-017 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

7B-018 Short-term scenic integrity objectives of rehabilitation and enhancement may be used until scenic integrity objectives are achieved.

~~7B-019 Manage to maintain and enhance the Rural Americana theme for the Mount Rogers NRA.~~ Not applicable to the GWNF.

Minerals

7B-020 These corridors and viewsheds are available for federal oil and gas leasing with controlled surface use to protect the scenic resources and values. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on scenic resources and values.

7B-021 Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect the scenic resources and values.

7B-022 Permit new borrow pits, provided they meet the scenic integrity objective. Rehabilitate or reclaim existing borrow pits that are currently not meeting the scenic integrity objective, after coordinating between resources to determine if a current need for borrow exists by the Forest Service or partner State or County agency

7B-022 Permit new borrow pits, provided they meet the scenic integrity objective. Rehabilitate or reclaim existing borrow pits that are currently not meeting the scenic integrity objective, **ADDITION:** after coordinating between resources to determine if a current need for borrow exists by the Forest Service or partner State or County agency

7B-xxx **New Standard:** Consider opportunities to provide interpretation of interesting geologic or fossil features along roadsides, including in borrow pits.

Roads

7B-023 Permit new access roads, provided they quickly enter and leave the seen area and do not parallel existing travelways.

7B-024 All roads, facilities, and signing are designed to blend in with surroundings.

Lands and Special Uses

7B-025 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites. Continue existing uses. Require necessary mitigation techniques, including screening, feathering, and other vegetation management techniques to mitigate the visual and other impacts of new or upgraded, utility corridors or communication sites.

7B-026 Allow agricultural special-use authorizations to maintain open and pastoral spaces.

7B-027 Authorize other special uses if consistent and compatible with the goals and objectives of this area.

7C ATV USE AREAS

With multiple competing recreational interests for national forest trails and limited land available to serve the many requests for additional trail miles of all types, the Forest serves this interest in a carefully planned and environmentally responsible manner. Challenging opportunities may exist for high-clearance and 4-wheel drive (4WD) vehicles on open roads. No cross-country travel occurs by Off-Highway Vehicles (OHV). Licensed OHV use may occur on any open forest road. Roads specifically suitable for OHVs only are identified on the Motorized Vehicle Use Map (MVUM).

Three areas (xx,xxx acres) provide 64 miles of trails systems, including loop riding opportunities, for All-Terrain Vehicle (ATV) use as follows.

Table X. ATV areas on the GWNF

Ranger District	ATV Area Name	Existing Route Mileage	Allowed Uses
North River	Rocky Run	10	ATVs, 4WD*, motorbikes, mountain bikes
Lee	Taskers Gap - Peters Mill Run	36	ATVs, 4WD, motorbikes, mountain bikes
Pedlar	South Pedlar	18	ATVs, motorbikes, mountain bikes

*4WD trucks are allowed on only portions of the Rocky Run Trail.

Emphasis:

Provide for motorized recreation opportunities in designated areas and along designated routes. These use areas and corridors contain routes designated specifically for licensed full size off road vehicle, ATV, and motorcycle users. Licensed full size off road vehicle routes are existing system roads designated for their challenging terrain and low impact to other resources. Designated ATV use areas are managed to mitigate soil, water, and wildlife impacts. Facilities such as trailheads are provided to enhance the quality of the recreational experience and provide access to designated routes.

Desired Condition:

ATV use areas are managed to provide a variety of motorized recreation opportunities on identified routes in natural appearing settings. Routes are maintained, improved, or expanded to meet local demands. Trail difficulty levels vary to accommodate a variety of desires and abilities. Users are adequately advised of trail difficulty levels and hazards. Support facilities, including trailheads, parking lots, restrooms, water access, and information boards, are well designed to meet the needs of the visitor. Use areas, route information, and regulations are provided to make the visitors' experience more enjoyable. These routes and areas are managed and monitored to absorb moderate to high levels of use while protecting soil, water, and air resource conditions.

Maintenance is performed to protect the routes and minimize effects to soil and water resources. Routes may be closed seasonally or during inclement weather to protect resources. Off-route and other unauthorized OHV use is not allowed. When such use occurs to a chronic degree, the routes are closed permanently or until the situation is corrected. New routes are considered for development only when there is a demonstrated need, interest, and a developed partnership with user groups

ATV use areas provide primarily motorized recreation opportunities. While motorized recreation is emphasized on designated routes, other routes could be used for hiking, mountain biking, and

horseback riding. Other recreation opportunities such as hunting, fishing, and berry picking occur within the prescription area adjacent to the designated route corridors. Physical impacts are confined to the immediate trail or road profile and do not spread beyond. Though physical impacts from ATV use are confined to the immediate road or trail environment, sounds of motorized vehicles may be audible in other sections of the prescription area. Outdoor skills are of moderate or low importance for visitors except where knowledge of specialized activities such as driving ATVs is critical.

The landscape character is natural appearing with variations created by the recreational facilities. Recreationists enjoy traveling routes through a variety of landscapes. Along many of the routes, the views are restricted to the immediate foreground by vegetation and natural landform, but occasional openings reveal middleground or distant background vistas. Constructed routes blend well with the natural environment. Small created openings in the forest canopy may be apparent and visitors may see evidence of resource management activities; however, treatments blend with the natural landscape and vegetation diversity is enhanced over time. Constructed facilities are visually subordinate to the land.

A mix of forest successional stages will characterize use areas, with an emphasis on early-successional forests. Up to 16 percent of forested land may be in early-successional forest conditions; however, there are no early successional wildlife habitat objectives associated with this prescription. Lands within this prescription area are classified as suitable for timber production. Roads used or constructed to facilitate vegetation treatment are managed to provide non-conflicting access for both timber harvest and motorized recreation uses.

Wildlife species associated with early successional forest habitats and mixed landscapes expected to inhabit these areas include: eastern towhee, white-eyed vireo, least weasel, whip-poor-will, and orchard oriole. This management prescription also provides suitable habitat for ruffed grouse, eastern wild turkey and black bear. These areas provide excellent opportunities for wildlife viewing and hunting.

7C - ATV Use Areas

Standards

NOTE: The revised Forest Plan will not designate OHV roads so these standards from the Jefferson Forest Plan are not applicable.

~~7C 001 Locate OHV roads and trails outside riparian areas except at designated stream crossings. Use bridges or culverts at stream crossings where possible. When fords are used, provide at least 50 feet of gravel or other effective hardening/stabilization technique on stream approaches. Use erosion stone or larger rock to increase road-bearing strength at the water/land interface.~~

~~7C 002 Candidate OHV roads and trails are eliminated or mitigating measures are planned where soil movement cannot be kept within acceptable standards.~~

~~7C 003 Monitor soil and water impacts.~~

Roads

~~7C 004 Roads managed for licensed full size off road vehicles are open year round or seasonally with a C2 road management objective.~~

~~7C 005 Designated OHV routes remain open to public use unless unacceptable resource damage occurs.~~

7C-006 Favor repair, reconstruction, and relocation of portions of routes favored by OHV users receiving unacceptable resource damage over closing the entire route. When chronic problems occur the entire route may need to be closed.

7C-007 Include consideration of possible licensed full size off road vehicle routes in the roads analysis process.

ATV Use Area Standards

Water, Soil, and Air

7C-008 The trail system within each ATV use area must have a monitoring plan.

Terrestrial and Aquatic Species

7C-009 Limit creation of early-successional forest habitat to 16 percent of forested acres (based on the contiguous prescription area). Include naturally occurring patches of early successional forest two acres and greater in size when calculating allowable levels of early-successional forest creation.

7C-010 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

7C-011 Favor the retention of large (>20" d.b.h.[2]) standing snags and den trees when implementing silvicultural treatments.

Vegetation and Forest Health

7C-012 The forest health strategy is to diminish the occurrence of pest problems by managing host-type conditions at low hazard. Use appropriate and practical suppression of pests, both non-native and native, with all available tools as the normal practice.

7C-013 Assure salvage is rapid, complete, and emphasizes marketing timber before its value decreases.

Timber Management

7C-014 These areas are suitable for timber production.

7C-015 Use even and uneven-aged silvicultural systems. Thinning and group selection may be employed to increase the structural diversity of the prescription area.

7C-016 Regeneration units range from 5 to 40 acres in size.

7C-017 Regeneration harvest areas are primarily coppice with reserves with 15- 25 square feet of basal area per acre left to ensure adequate sunlight for oak regeneration and two-aged silvicultural systems which leave 20-40 square feet of basal area per acre. In order to provide vertical diversity and future mast production, leave trees with a mean diameter of the codominant trees in the stand.

7C-018 Clearcut harvest systems occur when necessary to achieve specific wildlife habitat objectives. Thinning and group selection silvicultural systems are also employed to provide the structural diversity required by some species within this habitat association.

7C-019 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	80-100
Cove hardwoods	70-90

White pine	60-80
Yellow pine	70-90
Scarlet oak/Black oak	70-90

Prescribed Fire and Unplanned Natural Ignitions Use

7C-020 Prescribed fire and unplanned natural ignition use are allowed to: create openings that stimulate soft mast production and browse; encourage oak sprouting; maintain, restore, and enhance native forest communities; ensure the continued presence of fire-dependent ecosystems; improve threatened, endangered, sensitive, and locally rare species habitat; and reduce fuel buildups. It is also used in conjunction with site preparation to accomplish silvicultural treatments.

7C-XXX **New standard:** Implement needed restorative measures to travelways and trails after prescribed fire or wildland fire use projects. Firelines are obliterated as soon as practicable.

Recreation

Trail Design

7C-021 Design and locate the trail network to discourage illegal access to areas off the designated routes. Full advantage is taken of natural and man-made features to use as physical barriers to illegal use.

7C-022 Prioritize new route locations as follows: 1) Existing open or closed system roads, 2) Closed or obliterated roads, 3) New construction.

7C-023 Construct trail and road systems that include both single-track, narrow trails for the motorcycle and ATV user as well as roads that may be used for larger four-wheel drive vehicles and for timber removal.

7C-024 Minimize user conflicts and safety hazards that may exist with other recreation users and between full size four-wheel drive vehicle users and ATV and motorcycle users, through trail design, layout, and signing.

7C-025 Minimize adverse effects on the land and resources, through trail design, layout, and management. Minimize damage to soil, watershed, vegetation, wildlife habitat, or other natural, heritage, and historical resources, and disturbance of wildlife on the public lands.

7C-026 Plan timber removal concurrently with possible route locations and opportunities.

7C-027 Obliterate decommissioned routes through restoration to their natural profile and revegetate to prevent continued use.

Trail Management

7C-028 Actively recruit volunteer organizations through the Adopt-A-Trail program to become involved in the long-term construction and maintenance of trail systems.

7C-029 Relocate or close routes when unacceptable adverse effects occur or are likely to occur. The routes or trails remain closed until the adverse effects are eliminated and until measures are implemented to prevent recurrence.

7C-030 Relocate or close existing routes located in or adjacent to sensitive areas. Restore and revegetate unneeded old routes to their natural profile.

7C-031 Trail system designs with a series of loops are encouraged. This results in a more compact trail system that confines impacts and provides more options for users of varying skill levels

Public Safety and Law Enforcement

7C-032 Promote public safety and effective law enforcement.

7C-033 Provide sanitary facilities in ATV areas.

7C-034 Within ATV areas, provide public information that, as a minimum, includes maps showing open, closed, and restricted routes and areas, as well as the conditions of such use.

Monitoring

7C-035 The effects of vehicle use, noise levels, enforcement of restrictions and closures are closely monitored and evaluated.

Scenery

7C-036 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	L	L	L	L	L

7D CONCENTRATED RECREATION ZONES

Since its earliest days, the George Washington National Forest has offered facilities to the public for overnight and day use recreation activities. Under the New Deal of the 1930's and early 1940's, the Civilian Conservation Corps constructed multiple recreation sites across the National Forest. Several decades later, in 1962, the Outdoor Resources Review Commission's report to Congress and the President resulted in appropriated funds dedicated to providing more developed recreation facilities on public lands, including the George Washington NF. The 1987 President's Commission on Americans Outdoors report also recommended additional outdoor recreation opportunities and facilities be provided on public lands, although the funding for implementation was minimal compared to the earlier employment and recreation initiatives.

Today, the George Washington National Forest offers the following developed recreation facilities:

20 family campgrounds, ranging from highly developed to primitive
8 group campgrounds, ranging from moderately developed to primitive
1 equestrian campground, primitive
8 swimming beaches
20 family picnic areas (not including the ones associated with the beaches)
11 group picnic areas with shelters
11 boating sites (ramps or boat launches on lakes, ponds, rivers)
4 shooting ranges

2 hang gliding sites
11 interpretive sites including a cabin, historic furnaces, and highly developed nature and history trails with interpretive signs
1 observation tower near parking; another observation tower 1.5 mile hike from parking area
21 developed trailhead parking areas.

Emphasis:

Concentrated Recreation Zones are managed to provide the public with a variety of recreational opportunities in visually appealing and environmentally healthy settings. Developed recreation areas, concentrated use areas, and areas of high density dispersed recreation activity form Concentrated Recreation Zones. Facilities are provided to enhance the quality of the recreational experience and/or to mitigate damage to the affected ecosystems. These areas also serve as "gateways" to the wide diversity of recreation opportunities on the remainder of the forests.

Desired Condition:

Visitors are able to choose from a wide variety of recreation opportunities in high quality, well maintained developed or dispersed settings. Campgrounds, picnic sites, boat ramps, river access sites, swimming beaches, interpretive sites, primitive vehicle camps, rifle ranges, trailheads and concentrated trail systems, are all examples of facilities found in Concentrated Recreation Zones. Other facilities consistent with the mission and complimentary to the ecosystem may also be provided. Constructed facilities are normally visually subordinate to the land and depend on the development scale appropriate to the recreational opportunity spectrum class. Facilities outside the developed recreation sites are provided to protect resources. Facilities that provide for user convenience, as well as for protection of resources, are constructed and/or maintained in the developed recreation areas. Outdoor skills are generally of low importance except where knowledge of specialized activities, (i.e. boating or horseback riding) is critical. Trails through this area are well-marked and may include features for visitors with special access needs, loop systems, and/or interpretive programs. Motorized access and their support facilities (i.e. roads, parking lots, or water access) are emphasized, although non-motorized experiences (i.e. walking and viewing nature) are also often present.

Use may be highly concentrated in some spaces or relatively uncrowded in other sections of Concentrated Recreation Zones. Recreation information and regulations are provided to make the visitors' experience more enjoyable. Interpretive programs may also be offered to enhance the visitor's educational and recreational experience. Access to fishing, hunting, and nature study are emphasized. Fish stocking is appropriate for Concentrated Recreation Zones.

The landscape character is a cultural enclave in natural appearing surroundings. A visually appealing landscape is emphasized by providing an open park-like setting highlighting large diameter trees and featuring special attractions like rock outcroppings and waterfalls. Management activities maintain a healthy mid-successional forest of mixed hardwoods, hemlocks, and white pines. Understory vegetation includes a variety of native deciduous and evergreen flowering trees, shrubs and wildflowers. These areas may also include natural appearing open areas, balds, or pastoral landscapes. The scenic integrity objectives are in the upper values of high to moderate.

Some of these concentrated recreation areas are within the foreground of the Appalachian National Scenic Trail. Within the foreground of the Appalachian Trail, management practices are designed to achieve the desired condition of this management prescription as well as protect the Appalachian Trail experience, strengthen the role of volunteers and volunteer organizations, provide opportunities for high quality outdoor recreation experiences, and provide for the conservation and enjoyment of the nationally significant scenic, historic, natural and cultural qualities of the land through which the Appalachian Trail passes.

Vegetation is influenced to a large degree by humans, both through management for aesthetics and

safety and through the high level of recreation use. Commercial timber harvest is appropriate to maintain the long-term goals of a diverse and vigorous forest emphasizing recreation, scenery, and visitor safety. Timber harvesting operations focus on what is retained in the forest, not on wood fiber production. Timber harvest is carefully timed and designed to be subtle. Integrated pest management is used to eradicate or suppress insects, diseases, and non-native, invasive vegetation.

Even and uneven-aged forest communities continue to develop throughout the area, along with medium and small patches of late successional to old growth forest communities. Up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully when compatible with the recreation and scenic objectives of the concentrated recreation area; however, no early successional habitat objectives are associated with this prescription. Wildlife viewing opportunities are maintained and expanded through livestock grazing, cultivation, mowing, and burning of openings and pastoral areas.

7D - Concentrated Recreation Zones

Standards

Terrestrial and Aquatic Species

7D-001 Wildlife and fish habitat improvements are allowed to enhance wildlife viewing and fishing opportunities in a manner complimentary to the area. Existing wildlife openings, pastoral areas, or old fields may be maintained. Expansion of existing openings and/or creation of new openings may occur. Maintenance methods may include cultivation, grazing, mowing, and burning. Use of native species will be emphasized.

7D-002 Improvements appear natural and remain subordinate to the landscape. Watchable wildlife species habitat improvements are encouraged.

7D-003 Hunting is prohibited within developed recreation sites.

Vegetation and Forest Health

7D-004 The forest health strategy is to prevent the occurrence of pest problems by managing host-type conditions at low hazard. Aggressive suppression of pests, both non-native and native, with all available integrated pest management tools is normal practice. Favor the most effective control method. Salvage, cut and leave, and pruning are rapid and complete to protect the health and safety of visitors and facilities.

7D-005 Allow vegetation management activities to:

- Maintain developed and dispersed recreation facilities, including roads and trails;
- Maintain open areas, old field habitats, pastoral settings, and vistas that enhance the scenic qualities of the recreation area;
- Enhance or rehabilitate scenery, including:
    - Create aesthetically desired stand structure and species composition including a pleasing mosaic of tree species of various densities and stem sizes, park like effects, and enhancement of fall color species;
    - Feature flowering trees, character trees, and shrub species;
- Enhance both game and non-game wildlife habitat;
- Minimize impacts from insect or disease outbreaks and rehabilitate damaged areas;
- Reduce fuel buildups;

- Control non-native invasive vegetation; or
- Provide for public health and safety.

7D-006 Prepare vegetation management plans that emphasize damage prevention practices for developed recreation areas.

Timber Management

7D-007 These lands are classified as unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

7D-008 Clearcutting may only be used to open up vistas, create spatial diversity along travelways, decrease straight line effect of cleared utility corridors, create watchable wildlife openings, for insect and disease suppression, or for scenic rehabilitation.

Wildland Fire Suppression

7D-009 Lightning fires are generally suppressed to minimize acreage burned due to high levels of public use and infrastructure investments in these areas.

Prescribed Fire and Unplanned Natural Ignitions Use

7D-010 Prescribed fire is permitted for vegetation management to meet scenery, landscape character and hazard fuels reduction objectives. In developed recreation areas, evidence of firelines is obliterated as soon as practicable.

7D-011 Unplanned natural ignition use is prohibited.

Recreation

7D-012 Concentrated-use areas are inspected annually and high-risk conditions are corrected, identified to the public, or the area is closed.

7D-013 A site safety inspection is completed annually. Documented high-risk conditions are corrected prior to seasonal use in all developed recreation areas.

7D-014 Rest rooms are provided, are functional and in good repair.

7D-015 To keep humans free from unhealthy exposures to human waste, the waste is removed immediately upon discovery or notification.

7D-016 High-risk site conditions that develop during the use season are mitigated or the site is closed.

7D-017 These areas are unsuitable for designation of ATV use areas, although trailheads and connecting trails to adjacent ATV use areas are allowed.

7D-018 Licensed OHV routes along existing roads may be designated in these areas.

Appalachian National Scenic Trail

7D-019 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Scenery

7D-020 The landscape character is natural appearing, pastoral, or historic with variations created by the recreational facilities.

7D-021 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

7D-022 Rifle ranges are managed to meet or exceed a low scenic integrity objective across all scenic classes.

Roads

7D-023 All roads, facilities, and signing are designed to blend in with surroundings.

7D-024 The standard of road is commensurate with the recreation development level.

7D-025 Existing open public roads are maintained at or above current levels to provide for public access and safety.

7D-026 Road decommissioning is informed by a watershed-scale or site-specific road analysis.

Minerals

7D-027 These areas are available for federal oil and gas leasing with controlled surface use to protect the recreation resources and values. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on recreation and scenery.

7D-028 These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed when: a) the materials are used within the recreation area itself; and b) use is necessary to protect the resources and values of the area.

Lands and Special Uses

7D-029 These areas are unsuitable for new linear rights-of-way, communication sites or **ADDITION: commercial wind generation**, with the exception that local electrical distribution lines are allowed. Other special uses are authorized if consistent and compatible with the goals and objectives of these areas.

7E1 DISPERSED RECREATION AREAS—UNSUITABLE

A number of developed recreation sites serve as gateways for dispersed recreation opportunities. In many cases, the developed recreation sites were developed to serve the needs of dispersed recreationists and protect resources. Interconnected trails and/or multiple loop trails provide opportunities for more concentrated dispersed recreation around or tangent to these recreation sites. The specific areas are as follows:

Table 2. High density dispersed recreation areas

Ranger District	Dispersed Recreation Area	Approximate Acres
North River	Brandywine	1090
	Hone Quarry	660
	North River	6,930
James River	Longdale	435

	Children's Forest	245
Lee	Trout Pond	1,040
	Elizabeth Furnace	2,930
	Pedlar Va. Wildlife Center	385
	Sherando	3,715
	Pedlar River	690
	Crabtree Meadows	1,250
	Shoe Creek	1,255
Warm Springs	Walton Tract	950
	Hidden Valley	2,825
	Lake Moomaw	4,325

Emphasis:

These are areas of non-formal camping and recreational use in various locations across the forest. Dispersed recreation demand is managed to provide the public with a variety of recreation opportunities in a setting that provides quality scenery, trails, and limited facilities. These are frequently areas of low recreation use, low hunting use, and poor access.

Desired Condition:

Visitors are able to choose from a wide variety of non-motorized dispersed recreation opportunities such as hiking, mountain bike riding, rock climbing, nature study, hunting, fishing, and river running. Limited motorized access may be available in some parts of these areas.

Visitors seldom see other people in some parts of these areas. Trails are maintained, but seldom improved or expanded. Outdoor skills are of moderate importance for visitors except where knowledge of specialized activities such as horseback riding, mountain biking, rock climbing, and boating is critical.

These areas are unsuitable for timber production; however, commercial timber harvest is appropriate to maintain the long-term goals of a diverse and vigorous forest with sensitivity to dispersed recreation and scenic values. Prescribed fire, integrated pest management and commercial timber harvest are appropriate to manage vegetation. Integrated pest management is used to eradicate or suppress insects, diseases, and non-native, invasive vegetation. Wildland fires are used to restore and maintain historic fire regimes. Wildlife viewing opportunities are maintained through livestock grazing, cultivation, mowing, and burning of openings and pastoral areas.

These areas are characterized by a predominance of mid- and late-successional forests with a high to intermediate tolerance to shade. The valued natural appearing landscape character appears predominately intact with no noticeable deviations. Uneven-aged forest communities begin to develop throughout the area, along with large, medium and small patches of late successional to old growth forest communities. Structural diversity within mixed mesophytic and dry-to-mesic oak forest communities is enhanced through commercial and non-commercial vegetation management activities. Up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully when compatible with the recreation and scenic objectives of the area.

7E1 - Dispersed Recreation Areas—Unsuitable

Standards

Terrestrial and Aquatic Species

7E1-001 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife may be present and maintained, and expansion of openings or creation of new permanent openings of this type may occur. Native species are emphasized when establishing food plants for wildlife. Some openings provide permanent shrub/sapling habitat as a result of longer maintenance cycles.

Rare Communities and Old Growth

7E1-002 Old growth patches of all sizes and community types are maintained and restored.

Vegetation and Forest Health

7E1-003 Native forest insect and disease outbreaks are controlled only to prevent unacceptable damage to resources on adjacent land or to protect threatened, endangered, and sensitive species. Non-native, invasive insects and diseases may be eradicated or suppressed to prevent a loss of the old growth community. Favor biological control methods.

7E1-004 Eradicate non-native invasive plants when the infestations are isolated. Use approved hand-applied chemicals, when necessary.

7E1-005 Allow vegetation management activities to:

- Enhance or rehabilitate scenery;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce fuel buildups;
- Restore, enhance, or mimic historic fire regimes;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation.
- Provide for public health and safety;
- Meet trail construction and maintenance needs

Timber Management

7E1-006 These lands are classified as unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

7E1-XXX NEW STANDARD: Salvage of dead and dying trees is only allowed if the biologic resource for which the area was established is not impaired by the salvage operation.

Prescribed Fire and Unplanned Natural Ignitions Use

7E1-007 Vegetation management may be accomplished with management-ignited prescribed fire, unplanned natural ignition use, and mechanical treatments as an appropriate method of reducing costs associated with these activities.

7E1-XXX **New standard:** Implement needed restorative measures to travelways and trails after prescribed fire or wildland fire use projects. Firelines are obliterated as soon as practicable.

Recreation

7E1-008 New facilities such as trails, trailheads, toilets, and parking areas are allowed, commensurate with the public use of the area.

~~7E1-009 Designated OHV routes are allowed.~~ Not applicable on the GWNF.

Scenery

7E1-010 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	M	M	M	M	M

7E1-011 Management activities are designed to meet or exceed a high Scenic Integrity Objective in semi-primitive non-motorized areas within this prescription area.

Roads

7E1-012 Existing open public roads are maintained at or above current levels to provide for public access and safety.

7E1-013 All roads, facilities, and signing are designed to blend in with surroundings.

7E1-014 Road decommissioning is informed by a watershed-scale or site-specific roads analysis.

7E2 DISPERSED RECREATION AREAS-SUITABLE

A number of developed recreation sites serve as gateways for dispersed recreation opportunities. In many cases, the developed recreation sites were developed to serve the needs of dispersed recreationists and protect resources. Interconnected trails and/or multiple loop trails provide opportunities for more concentrated dispersed recreation around or tangent to these recreation sites. The specific areas are as follows:

Table x. High density dispersed recreation areas

Ranger District	Dispersed Recreation Area	Approximate Acres
North River	Shaws Fork	250
	North River	3,930
Warm Springs	Hidden Valley	610

Emphasis:

These areas receive moderate to high recreation use and are managed to provide a variety of dispersed recreation opportunities, improve the settings for outdoor recreation, and enhance visitor experiences, in a manner that protects and restores the health, diversity, and productivity of the land. These areas provide a sustained yield of timber products; however timber harvest methods used are compatible with the recreational and aesthetic values of these lands.

Desired Condition:

These areas are characterized by easy access and are capable of sustaining a relatively high number of recreationists in a manner that protects the surrounding water, soil, vegetation, and wildlife. Visitors enjoy the natural appearing landscape character of these settings and are able to choose from a wide variety of well-maintained nature-based recreation opportunities. High quality forest roads and well-marked trails through these areas provide easy access for seniors, urban visitors, and recreationists with special access needs. Management is designed to meet the growing demands for pleasure driving, day hiking, mountain biking, horseback riding, dispersed camping, backpacking, hunting, fishing, nature study, and nature photography and to showcase high quality scenery from travelways and concentrated use areas maintained through low intensity, planned vegetation management activities.

Some areas may also provide licensed off road vehicle driving, rock climbing, river running, hang gliding, or a variety of other nature-based outdoor recreation activities. Trails through this area are well-marked and may include features for visitors with special access needs, loop systems, and/or interpretive programs. Facilities within these areas may include portable or permanent toilets, trash receptacles, fire grills, signs, or vehicle barriers; however, facilities are generally rare and are only provided for health and sanitation or to protect the area from resource damage.

The sights and sounds of other visitors and motorized vehicles are normally present. The opportunity to encounter other visitors is high along roadways, at parking areas, pullouts, and overlooks, but may be moderate to low on trails away from congregated use areas. Visitors are rarely challenged to rely on their own physical abilities and outdoor skills. Once away from open roads and trailheads, opportunities for solitude are available. In these more remote areas, visitors may take on some risk and be challenged to rely on their own personal physical abilities and primitive recreational skills such as bouldering, climbing, stream fording, and orienteering.

Roads are generally open to motorized activities. Non-motorized and motorized trails are maintained, improved, or expanded to meet local demands provided watershed and ecosystem health are not negatively affected. Limitations of use are implemented if any dispersed activity results in, or is expected to result in, negative affects to watershed or ecosystem health.

A mix of forest successional stages characterizes these areas. Infrequent pastoral and historic/cultural enclaves may also exist. From primary travelways and concentrated use areas, the valued character of these landscapes appears intact with no noticeable deviations. Even and uneven-aged forest communities are managed throughout the area, along with the continued development of medium and small patches of late successional to old growth forest communities. In order to provide a diversity of wildlife habitats for hunting and wildlife viewing, it is an objective to have at least four percent of forested lands in early-successional forest conditions created both naturally and purposefully when compatible with the recreation and scenic objectives of these areas. Structural diversity within mixed mesophytic and dry-to-mesic oak forest communities is enhanced through commercial and non-commercial vegetation management activities.

Wildlife species associated with mid- to late-successional deciduous forest habitats and mixed landscapes that are expected to inhabit these areas include: hooded warbler, southern pigmy shrew; whip-poor-will; least weasel, downy woodpecker; eastern gray squirrel; and orchard oriole. This management prescription also provides suitable habitat for ruffed grouse, eastern wild turkey and black bear. These areas provide excellent opportunities for wildlife viewing and hunting.

These areas are suitable for timber production. Commercial timber harvest is used to maintain the long-term goals of a diverse and vigorous forest with sensitivity to dispersed recreation and scenic values. Prescribed fire, wildland fire use, integrated pest management and commercial timber harvest are appropriate to manage vegetation. Wildland fires are used to restore and maintain historic fire regimes. Wildlife viewing opportunities are maintained and expanded through livestock grazing, cultivation, mowing, and burning of openings and pastoral areas.

Timber harvesting operations focus on what is retained in the forest, not on wood fiber production. Timber harvest is carefully timed and designed to be subtle. Group selections, individual tree selections, thinnings, and shelterwood harvests are predominately used.

7E2 - Dispersed Recreation Areas-Suitable

Standards

Terrestrial and Aquatic Species

7E2-001 Wildlife and fisheries habitat improvements are allowed to enhance wildlife viewing, hunting, and fishing opportunities in accordance with scenic integrity objectives. Watchable wildlife species habitat improvements are encouraged.

7E2-002 Existing old fields, pastoral areas, and wildlife openings may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

7E2-003 Limit creation of early-successional forest habitat to 10 percent of forested acres.

Rare Communities and Old Growth

7E2-004 Old growth patches of all sizes and community types are maintained and restored.

7E2-005 Interpretation of rare communities is encouraged when carefully controlled to promote understanding and stewardship.

Vegetation and Forest Health

7E2-006 Allow vegetation management activities to:

- Provide 4-10 percent early successional habitat;
- Create aesthetically desired stand structure and species composition including a pleasing mosaic of tree species of various densities and stem sizes, park like effects, and enhancement of fall color species;
- Maintain recreation facilities, including roads and trails;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation;
- Maintain, enhance, or restore the diversity and complexity of native vegetation;
- Reduce fuel buildups;
- Restore, enhance, or mimic historic fire regimes; or
- Provide for public health and safety.

Timber Management

7E2-007 These areas are suitable for timber production where hunting recreation and watchable wildlife are emphasized.

7E2-008 Even and uneven aged management systems are allowed, with an emphasis on group selection, thinning, two-aged and shelterwood treatments. Commercial thinning is commonly used to develop park-like stands and larger trees for aesthetic reasons.

7E2-009 Reserve trees in even aged harvest areas display good form.

7E2-010 Manage even-aged regeneration harvest areas with the following rotation ages:

Upland hardwoods	120-140
Cove hardwoods	100-120
White pine	80-100
Yellow pine	80-100
Scarlet oak/Black oak	80-100

Prescribed Fire and Unplanned Natural Ignitions Use

7E2-011 Vegetation management may be accomplished with management-ignited prescribed fire, unplanned natural ignition use, and mechanical treatments as an appropriate method of reducing costs associated with these activities.

Recreation

7E2-012 New facilities such as trails, trailheads, toilets, and parking areas are allowed, commensurate with the public use of the area.

Scenery

7E2-013 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	M	M	M	M	M

Roads

~~7E2-014~~ ~~Existing open public roads are maintained at or above current levels to provide for public access and safety~~. DELETION – Given historical road maintenance budgets, this standard may not be possible to maintain.

7E2-015 All roads, facilities, and signing are designed to blend in with surroundings.

7E2-016 Road decommissioning is informed by a watershed-scale or site-specific roads analysis.

7F BLUE RIDGE PARKWAY VISUAL CORRIDOR

The Blue Ridge Parkway was established June 30, 1936 as a recreation-oriented motor road connecting Shenandoah National Park in Virginia with the Great Smoky Mountains National Park in North Carolina. The Parkway itself is administered by the USDI Park Service as an elongated park for public use and enjoyment through safe, uninterrupted, leisure motor travel, which provides for the conservation and interpretation of the natural and cultural resources of the Southern Appalachian

Mountains. The Blue Ridge Parkway is known for spectacular mountain and valley vistas, quiet pastoral scenes, sparkling waterfalls, colorful wildflower and foliage displays, and its interpretation of mountain history and culture.

Emphasis:

The emphasis of this management prescription is to manage National Forest System lands that can be seen from the Blue Ridge Parkway in a manner which positively contributes to the Parkway visitor's experience along this motorized national treasure. Views from Parkway overlooks appear natural and retain high to very high scenic integrity.

Desired Condition:

The Blue Ridge Parkway visual corridor provides exceptional opportunities for motorized recreation, including scenic driving. The views along the Parkway are natural appearing and include a variety of landscape characters, ranging from a continuous overstory canopy of large hardwoods and pines, to pastoral, cultural, rural, and suburban. Urban landscapes may be seen in the background from some scenic overlooks. In the foreground, understory vegetation and ground cover provide colorful accents and interesting textures for each season. Road corridor improvements and interpretive facilities are evident changes to the natural environment, but these man-made alterations fit well with the character of the surrounding landscape. Forest management activities are not evident to the average visitor.

Vegetation is influenced both by natural processes and humans. Low intensity commercial timber harvest is appropriate to maintain the long-term goals of a diverse and vigorous forest with sensitivity to dispersed recreation and scenic values. Relatively longer rotation ages and a lower percentage of early successional forest in these areas reflect a "low intensity" approach to vegetation management and the higher priority of protecting the values of the Blue Ridge Parkway. Structural diversity within mixed mesophytic and dry-to-mesic oak forest communities is enhanced through commercial and non-commercial vegetation management activities. Up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully. Timber harvesting operations focus on what is retained in the stand, not on wood fiber production. Timber harvest practices are modified to recognize the aesthetic and recreational values of these lands. Group selections, individual tree selections, thinnings, and light shelterwood harvests are predominately used. Clearcutting and shelterwood harvests leaving less than 35 square feet of basal area are only used within areas seldom seen from the Parkway and its overlooks.

Prescribed fire, wildlife habitat improvements, and integrated pest management are also appropriate management tools to manage vegetation. Wildland fires are managed in cooperation with the Park Service using an appropriate management response to protect Parkway resources and visitor safety.

These areas are characterized by a predominance of mid- and late-successional forests with a high to intermediate tolerance to shade. Forest structure varies according to ecological factors, but largely consists of a mature overstory of hardwoods, occasionally mixed with pines, a fairly open midstory, and a well-developed herbaceous and shrubby understory. Understory vegetation includes a variety of native deciduous and evergreen flowering trees, shrubs and wildflowers. Even- and uneven-aged forest communities are managed throughout the area, along with continued development of medium and small patches of late successional to old growth forest communities. Up to four percent of forested land may be in early-successional forest conditions created both naturally and purposefully when compatible with the scenic objectives of the parkway corridor; however, no early successional habitat objectives are associated with this prescription. Wildlife viewing opportunities are maintained and expanded through cultivation, mowing, and burning of openings and pastoral areas.

7F - Blue Ridge Parkway Visual Corridor

Standards

General

7F-001 All management activities within this corridor must be compatible with maintaining, rehabilitating, or enhancing views from the Blue Ridge Parkway.

7F-002 Short-term scenic integrity objectives of rehabilitation and enhancement may be used until scenic integrity objectives are achieved.

Terrestrial and Aquatic Species

7F-003 Wildlife and fisheries habitat improvements are allowed to enhance wildlife viewing, hunting, and fishing opportunities in accordance with scenic integrity objectives. Watchable wildlife species habitat improvements are encouraged.

7F-004 Existing old fields, pastoral areas, and wildlife openings may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

7F-005 Up to 4% of this prescription area may be in early successional habitat conditions.

Rare Communities and Old Growth

7F-006 Old growth patches of all sizes and community types are maintained and restored.

7F-007 Interpretation of rare communities is encouraged when carefully controlled to promote understanding and stewardship.

Vegetation and Forest Health

7F-008 Forest structure is managed to favor flowering trees and shrubs.

7F-009 Control insect and disease outbreaks, when necessary, to protect the scenic values, to reduce hazards to visitors, or for safety or legal reasons. Eradicate recently established non-native pests when possible. Favor the most effective control method.

7F-010 Allow vegetation management activities to:

- Maintain developed recreation facilities, including roads and trails;
- Enhance or rehabilitate scenery, including:
  - Create aesthetically desired stand structure and species composition including a pleasing mosaic of tree species of various densities and stem sizes, park-like effects, and enhancement of fall color species;
  - Feature flowering trees, character trees, and shrub species;
- Enhance both game and non-game wildlife habitat;
- Improve threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce fuel buildups;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation; or
- Provide for public health and safety.

7F-011 Salvage is allowed for scenic rehabilitation, fuel reduction, and to capture the economic value of dead, dying and diseased trees.

Timber Management

7F-012 Areas seldom seen from the Blue Ridge Parkway and its associated overlooks are suitable for timber production.

7F-013 The remainder of this corridor is unsuitable for timber production. Vegetation management may be accomplished with commercial timber sales as an appropriate method of reducing costs associated with these activities.

7F-014 Use even and uneven-aged silvicultural systems. Uneven-aged forest management (e.g. group selection, individual tree selection) practices are designed to result in forest structure and composition consistent with late-successional deciduous forest habitats over the long-term.

7F-015 Regeneration units range from 2 to 25 acres in size, clustered on the landscape.

7F-016 Regeneration harvest areas are primarily coppice with reserves with 15- 25 square feet of basal area per acre left to ensure adequate sunlight for oak regeneration and two-aged silvicultural systems which leave 20-40 square feet of basal area per acre. In order to provide vertical diversity and future mast production, leave trees with a mean diameter of the codominant trees in the stand.

7F-017 Clearcut harvest systems occur when necessary to achieve specific wildlife habitat objectives. Thinning and group selection silvicultural systems are also employed to provide the structural diversity required by some species within this habitat association.

7F-018 Manage even-aged regeneration harvest areas with the following rotation ages:

Upland hardwoods	120-180
Cove hardwoods	120-180
White pine	80-100
Yellow pine	80-100
Scarlet oak/Black oak	80-100

Wildland Fire Suppression

7F-019 Wildland fires are managed in cooperation with the Park Service using an appropriate management response to protect Parkway resources and visitor safety.

Prescribed Fire and Unplanned Natural Ignitions Use

7F-020 Prescribed fire and unplanned natural ignition use are coordinated with the Park Service to accomplish both Park Service and Forest Service management objectives in this corridor and adjacent management prescriptions.

Recreation

7F-021 Interpretive services including trails, signs, viewing areas, self-guided programs, and buildings are provided to enhance the understanding of, and appreciation for the natural environment, cultural resources, and the Parkway's special features.

Scenery

7F-022 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

Range

7F-023 Livestock grazing is not permitted.

Minerals

7F-024 The Blue Ridge Parkway corridor is available for federal oil and gas leasing with controlled surface use to protect the views and other values of the corridor. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on scenic resources and other values.

7F-025 Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect the scenic resources and other values.

7F-026 Permit new borrow pits, provided they meet the scenic integrity objective. Rehabilitate or reclaim existing borrow pits that are currently not meeting the scenic integrity objective.

Roads

7F-027 Permit new access roads, provided they quickly enter and leave the seen area and do not parallel existing travelways.

7F-028 All roads, facilities, and signing are designed to blend in with surroundings.

7F-029 Density of open roads and/or motorized vehicle trails remains near the current level throughout the planning period, with only small increases or decreases.

Lands and Special Uses

7F-030 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites **ADDITION: or wind generation**. Continue existing uses. Require necessary mitigation techniques, including screening, feathering, and other vegetation management techniques to mitigate the visual and other impacts of upgraded, utility corridors, or communication sites.

7F-031 Authorize other special uses if consistent and compatible with the goals and objectives of this area.

7G PASTORAL LANDSCAPES

Emphasis:

The emphasis is on providing, through maintenance or restoration, high quality, generally open landscapes with a pastoral landscape character. These landscapes are frequently found in visually important travel corridors. Rangelands are also included in this area.

Desired Condition:

Visitors to these landscapes view and experience high quality pastoral scenery in a setting conducive to a variety of recreational experiences. These areas reflect a Rural Americana landscape character theme that represent remnants of a pleasant, peaceful, simple rural life. The backdrop for many of these areas is natural appearing forested landscapes or other similar privately owned pastoral landscapes. Human cultural modification is evident in the form of pastures, hedgerows, fencelines, farm paths, paved roads and dirt travelways, an occasional outbuilding, springhouse or barn all complementing the desirable pastoral landscape attributes of the rural setting. Grazing cattle, horses, or sheep are commonly observed. The predominantly grassy openings vary in size and shape as a result of traditional cultural land use patterns. Some exhibit straight-lined edges and others follow natural landforms and watercourses.

Recreation uses include pleasure driving, photography, watching wildlife, and participating in dispersed recreation such as picnicking, strolling, horseback riding, hunting, and fishing. These areas are typically accessible by motor vehicle and some may have small parking areas or pullouts to allow visitors to stop and walk through the area. These areas provide important habitat for early successional species and watchable wildlife habitats. Examples include songbirds, woodpeckers, hummingbirds, butterflies, deer, rabbits, foxes, turkeys, waterfowl, and squirrels.

The sights and sounds of other visitors and motorized vehicles are common, but are moderated in areas away from congregated use areas. Visitors take on low risk and are not challenged to rely on their own physical abilities and outdoor skills. Facilities, though minimal, are designed to fit the character of the specific sites where they are located. Facilities might include pullouts, small parking areas, trailheads, bulletin boards, interpretive signage, fence stiles, rail, and other fences. Trails, if present, are generally of a low development scale and do not have hardened surfaces.

Vegetation consists predominantly of low grasses and wildflowers with some native deciduous and evergreen shrubs interspersed with an occasional tree, hedgerow, or small woodlot. For the most part the areas are on gently rolling terrain, some with exposed surface rock, rock outcrops, and meandering streams.

Wildlife species associated with grassland habitats expected to inhabit these areas include: whitetail deer, grasshopper sparrow, vesper sparrow, black rat snake, loggerhead shrike, and orchard oriole. These areas provide excellent opportunities for wildlife viewing and hunting. High elevation grasslands and balds also provide optimal habitat for the golden-winged warbler and chestnut-sided warbler.

Sound range management practices help to maintain important old-field and grassland habitats and aesthetically pleasing pastoral settings. National forest grazing allotments demonstrate how innovative range management practices can maintain and restore vegetated riparian areas and stable streambanks within the range of natural variability. The national forest grazing program benefits local communities through meat production and assistance to small farmers.

7G - Pastoral Landscapes

Standards

Vegetation and Forest Health

7G-001 These non-forest areas are unsuitable for timber management, although occasional tree removal or herbicide use may be necessary to manage forest encroachment, provide scenic views, improve visitor safety, or encourage the presence of certain watchable wildlife species.

7G-002 Eradicate non-native invasive plants.

Prescribed Fire and Unplanned Natural Ignitions Use

7G-003 Prescribed fire and unplanned natural ignition use are allowed to maintain pastoral landscapes.

Recreation

7G-004 New facilities such as trails, trailheads, toilets, and parking areas are allowed.

7G-005 These corridors are unsuitable for designation of new ATV routes or use areas.

Scenery

7G-006 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	M	M	M	M	M

Appalachian National Scenic Trail

7G-007 Within the foreground of the Appalachian Trail, all activities will be planned and carried out in cooperation with the appropriate Appalachian Trail management partner(s). See Management Prescription 4A for additional management direction applicable to this corridor.

Range

7G-008 Grazing is permitted in order to maintain a pastoral setting on areas historically grazed or on open cultivated areas.

7G-009 Grazing is not permitted without an Allotment Management Plan (AMP). AMPs are reviewed annually and revised when necessary.

7G-010 Stocking of range allotments will not exceed the carrying capacity.

Roads

7G-011 All roads, facilities, and signing are designed to blend in with surroundings.

Lands and Special Uses

7G-012 New land acquisitions containing old farms and pastoral areas are often assigned this management prescription, although there is no objective to acquire these types of landscapes.

8E1 - Ruffed Grouse/Woodcock Habitat Emphasis

NOTE: Management for ruffed grouse and woodcock may require Forest Plan direction that is distinctive enough from the direction provided in the larger blocks of Management Prescription Area 13 (Mosaics of Habitat) that it will need its own management

prescription area direction and its own land allocation (as in the Jefferson Forest Plan). If so, this is what the standards may look like.

Standards

Water, Soil, and Air

8E1-001 Early successional habitat openings are allowed within riparian corridors but must be a minimum of 25 feet from perennial streambanks.

8E1-002 Early successional habitat openings larger than 5 acres may extend into the adjacent upland areas, as long as the opening area within the riparian corridor (Management Prescription 11) is not greater than 5 acres in size.

Terrestrial and Aquatic Species

8E1-004 Retain an average of one large (>12" d.b.h.) down trees per acre as drumming logs.

8E1-005 Maintain or increase pine stands to provide winter thermal cover.

8E1-006 Limit creation of early successional forest habitat to 16 percent of forested acres (based on the contiguous prescription area).

8E1-007 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur; however, transitional openings that move through the dense pole stage are preferred over permanent wildlife openings. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Vegetation and Forest Health

8E1-008 Retain patches of coniferous cover during site preparation and timber stand improvement activities when consistent with overall regeneration and species composition objectives.

8E1-009 To achieve the structural habitat conditions for ruffed grouse, retain <20 square feet of residual basal area per acre in harvest units, favoring oaks of mast-producing size as residuals.

8E1-010 Retain high stem density evergreen shrub thickets on at least 5-10% of the area to provide cover for adult ruffed grouse.

8E1-011 Maintain mature/immature oak "edges" with high stem density for grouse.

8E1-012 Maintain brushy edge around permanent wildlife openings for grouse. Encourage or plant soft mast-producing species in this zone.

8E1-013 Regenerate pine forest types artificially or naturally to native pine species that commonly occur within the same land type association. Regenerate pine-hardwood forest types artificially or naturally to mixed pine-hardwood stands of native species that commonly occur within the same land type association.

8E1-014 Manage for a diversity of oak species to minimize yearly fluctuations in acorn supplies.

8E1-015 The forest health strategy is to minimize the occurrence of pest problems by managing host-type conditions. Suppression of pests, both non-native and native, is accomplished with all available integrated pest management tools.

Timber Management

8E1-016 These areas are suitable for timber production.

8E1-017 Primary regeneration harvest method is clearcutting (with 6 reserve trees per acre for potential Indiana bat roost trees). Coppice with reserve harvests may be used where scenery concerns override habitat needs.

8E1-018 Regeneration units range from 5 to 20 acres in size, the optimum size of clearcuts for ruffed grouse.

8E1-019 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	80-100
Cove hardwoods	70-90
White pine	60-80
Yellow pine	60-80
Scarlet oak/Black oak	60-80

Prescribed Fire and Unplanned Natural Ignitions Use

8E1-020 Prescribed fire and unplanned natural ignition use are allowed to: create a mosaic of early successional habitat patches; create openings that stimulate soft mast production and browse; encourage oak sprouting; maintain, restore, and enhance native forest communities; ensure the continued presence of fire-dependent ecosystems; improve threatened, endangered, sensitive, and locally rare species habitat; and reduce fuel buildups. It is also used in conjunction with site preparation to accomplish silvicultural treatments.

Recreation

8E1-021 Wildlife openings, including linear strips, are signed to protect established vegetation from recreational use (e.g. horseback riding, mountain biking, OHV use, and camping) when a reoccurring problem exists.

8E1-022 ~~Designated OHV routes and~~ OHV and mountain bike use may be restricted if negatively impacting nesting or brood-rearing habitat.

Scenery

8E1-023 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	L	L	L	L	L

8E4 INDIANA BAT HIBERNACULA PROTECTION AREAS

These areas are located around caves that are known to contain the Indiana bat (*Myotis sodalis*), a federally listed endangered species that occurs in several locations across western Virginia, where it is

near the eastern edge of its global range.

These Indiana bat "hibernacula" areas are divided into two areas: the Primary Cave Protection Area (xx,xxx acres) and the Secondary Cave Protection Area (xx,xxx acres). A primary cave protection area consists of a radius of no less than one half mile around each hibernaculum, defined by National Forest surface ownership and topography. This area is intended to protect the integrity of the cave and the immediate surrounding uplands where bats swarm and forage in the fall. A secondary cave protection area consists of a radius of approximately 1 1/2 miles around each primary cave protection area, defined by easily recognizable features on the ground. This area is designed to further maintain and enhance swarming, foraging, and roosting habitat. (Please note that the term "hibernacula" refers to caves in which bats hibernate and is used interchangeably with caves throughout this document. The singular form is hibernaculum.)

Indiana bats are known to be hibernating in four caves located on or near the George Washington National Forest: Mountain Grove, Starr Chapel, Clarks, and Hupman's Saltpetre Caves. These areas are intended to contribute to the goals of reversing population declines and reestablishing healthy populations of Indiana bats across the eastern United States.

These prescription areas are intended to contribute to the goals of reversing population declines and reestablishing healthy populations of Indiana bats across the eastern United States. Management is based on the guidelines of the Indiana Bat Recovery Strategy for the George Washington and Jefferson National Forests (April, 1997).

Management activities are designed to: 1) protect hibernacula (caves in which the bats spend the winter); 2) maintain and enhance upland and riparian swarming and foraging areas; and 3) identify and protect summer roosting and maternity site habitat. The proposed conservation measures identified in the Indiana Bat Recovery Strategy for the protection and promotion of habitat for Indiana bats on the Jefferson National Forest are applied at three scales:

1) A **primary cave protection area** as consisting of a radius of no less than one half mile around each hibernaculum, defined by national forest surface ownership and topography. This area is intended to protect the integrity of the cave and the immediate surrounding uplands where bats may swarm and forage in the fall.

2) A **secondary cave protection area** as consisting of a radius of approximately 1 ½ miles around each primary cave protection area, defined by easily recognizable features on the ground. This area is designed to further maintain and enhance swarming, foraging, and roosting habitat.

3) Because Indiana bats are known to travel over 200 miles between winter and summer habitats, standards are also applied to the Jefferson National Forest as a whole. These can be found specifically in the Forestwide Direction, Chapter Two, Indiana Bat Management. These standards are designed to protect foraging areas; non-cave associated roosts and maternity sites, if any are discovered on the Forest.

8E4a. Indiana Bat Primary Cave Protection Area

Emphasis:

Within this prescription area, habitats are managed to maintain, restore, and enhance Indiana bat populations. Management of the primary cave protection area is focused on protecting the watershed of the cave along with maintaining and enhancing the surrounding environment where bats swarm, forage, and roost. Timber harvest is not appropriate within this prescription area.

Desired Condition:

This prescription area includes caves known to contain the Indiana bat, as well as the primary cave

protection areas surrounding these hibernacula. Indiana bat hibernacula maintain winter temperatures between 39° and 50° F, and relative humidity above 54%. The hydrologic functioning, atmospheric conditions, and structural integrity of these caves are maintained. The ability of bats to enter, exit and move within hibernacula is unhampered. They are free from human disturbance from September 1 until June 1, when bats are hibernating and swarming. It is a long-term goal to acquire lands surrounding caves within the Forest's proclamation boundary that are known to contain the Indiana bat.

The landscapes of these areas predominately feature a structurally diverse older aged forest community with a continuous forested canopy. Grazed pastures are maintained and open woodlands may be restored through prescribed fire or wildland fire use. These types of open habitats provide direct sunlight to roost trees and abundant Indiana bat prey. Cavity trees, cull trees, standing dead trees, storm and fire damaged live trees, and down logs are common throughout the area. Active roost trees are identified and protected from disturbance. At least six roost trees that retain slabs of exfoliating bark, greater than nine inches in diameter, with at least some daily exposure to sunlight are provided per acre. Indiana bat movement and flight paths are not restricted by dense understory vegetation. Indiana bat prey, such as flying insects, are abundant in terms of both numbers of individuals and diversity of species.

Natural processes eventually result in large patches of late successional to old growth forests. Activities to benefit bat habitat are limited to management of forest visitors, prescribed fire, wildland fire use, domestic livestock grazing, selected non-commercial tree cutting, and integrated pest management to control non-native invasive species like gypsy moth and autumn olive. Occasional gaps may occur naturally or purposefully to increase sunlight exposure on selected roost trees. No activities which could lead to disruption of the cave environment or the "taking[5]" of an Indiana bat occur in this area.

Insects and diseases play a natural role in shaping future plant and animal species composition and successional stages across these areas; however, non-native vegetation occurs only as transients and is not self-perpetuating. Biological or species-specific pesticide controls of gypsy moth, hemlock woolly adelgid, autumn olive, and other non-native species are permitted with full consideration of the effects on the Indiana bat, their habitat, and their prey. Timber harvest and pesticide controls may be implemented to aid in the study of effects of non-native pests on the Indiana bat.

Drinking water sources are available in created upland or ridgetop ponds. Ponds typically adjoin mature forest and most have a flight corridor, such as a pasture, road or wildlife linear strip, leading into them. Existing wildlife openings may be maintained. Aside from Indiana bats, wildlife species associated with mid- to late-successional deciduous forest habitats that are expected to inhabit this area include: hooded warbler, southern pigmy shrew; whip-poor-will; least weasel, downy woodpecker; eastern gray squirrel; and orchard oriole. Because the landscapes in which this prescription lie, including private lands, are over 70% forest cover, one could also expect to find area-sensitive mid- to late-successional forest species including: ovenbird, cerulean warbler, black-billed cuckoo, and Swainson's warbler. This management prescription also provides suitable habitat for eastern wild turkey and black bear.

Low-impact (dispersed) recreational uses of these prescription areas are compatible with the long-term conservation of the Indiana bat. These include hiking, hunting, backpacking, picnicking, photography, and wildlife study. Spelunking may be allowed when the bats are not using the caves for hibernation. Existing trails and roads are used for access to specified areas for these activities, although decommissioning of existing roads may occur. Off-road vehicle use is prohibited. Educational materials describing the Indiana bat, its geographical distribution, its habitat, fragility, and conservation efforts are readily available to visitors of the area. The Indiana bat is actively protected against collection and killing, except for specified scientific purposes. Trail and road reconstruction, minor relocation, and new parking facilities are permitted. All activities are conducted with full consideration of effects on Indiana bat populations.

8E4b. Indiana Bat Secondary Cave Protection Area

Emphasis:

Within this prescription area, habitats are managed to maintain, restore, and enhance Indiana bat populations. The goals of the secondary cave protection area are to maintain and enhance swarming, roosting, and foraging habitat and to involve regularly scheduled vegetation management activities to maintain and enhance mid- to late-successional oak-hickory forests, open woodland habitats, and the trees that are most likely to develop and retain slabs of exfoliating bark. Commercial timber harvest is frequently the most practical and economical method of achieving these goals.

Desired Condition:

Management of the secondary cave protection area is focused on maintaining and enhancing swarming, roosting, and foraging habitat. The landscapes of these areas feature a structurally diverse older aged forest community with an almost continuous forested canopy. Where ecologically suitable, open pine-oak woodlands with a mature overstory and grassy understory are restored. Oak-hickory forests are managed to favor trees which develop and retain slabs of exfoliating bark including: shagbark hickory, bitternut hickory, white ash, red oak, chestnut oak, white oak, red maple, sugar maple, black gum, sycamore, black locust, and southern yellow pines. Cavity trees, cull trees, standing dead trees, storm and fire damaged live trees, and down logs are common throughout the area. These areas contribute small patches of late-successional to old growth forests to the forestwide matrix. Active roost trees are identified and protected from disturbance. At least six roost trees that retain slabs of exfoliating bark, greater than nine inches in diameter, with at least some daily exposure to sunlight are provided per acre. Indiana bat movement and flight paths are not restricted by dense understory vegetation. Indiana bat prey, such as flying insects, are abundant in terms of both numbers of individuals and diversity of species.

Management activities designed to benefit bat habitat are used more frequently in the secondary cave protection area to maintain and enhance mid- to late-successional oak-hickory forests, open woodland habitats, and the trees that are most likely to develop and retain slabs of exfoliating bark. Additional trees with roosting potential are selected and sunlight conditions surrounding them are improved. Larger diameter snags with exfoliating bark are promoted and retained. Optimal foraging habitat with 50-70% canopy closure is provided to maximize both flying insect production and Indiana bat foraging success. 60% of these areas are greater than 70 years of age, and 40% of the oak-hickory forest types are greater than 80 years of age. Structural diversity within mixed mesophytic and dry-to-mesic oak forest communities may be enhanced through commercial and non-commercial vegetation management activities.

Four to ten percent of the secondary cave protection area may be in early-successional forest conditions to provide flight corridors and foraging habitat, provided other habitat objectives are also met. Drinking water sources are available in created upland or ridgetop ponds. Ponds typically adjoin mature forest and most have a flight corridor, such as a road or wildlife linear strip, leading into them. Existing wildlife openings are maintained along with occasional creation of new openings. Wildlife species associated with mid- to late-successional deciduous forest habitats and mixed landscapes that are expected to inhabit these areas include: hooded warbler, southern pigmy shrew; whip-poor-will; least weasel, downy woodpecker; eastern gray squirrel; and orchard oriole. This management prescription also provides suitable habitat for ruffed grouse, eastern wild turkey and black bear. These areas provide excellent opportunities for wildlife viewing and hunting. Because the landscapes in which this prescription lie, including private lands, are over 70% forest cover, one could also expect to find area-sensitive mid- to late-successional forest species including: ovenbird, cerulean warbler, black-billed cuckoo, and Swainson's warbler.

Non-native vegetation occurs only as transients and is not self-perpetuating. Biological or species-specific pesticide controls of gypsy moth, hemlock woolly adelgid, autumn olive, and other non-native species are permitted with full consideration of the effects on the Indiana bat, their habitat, and their prey. Timber harvest and pesticide controls may be implemented to aid in the study of effects of non-

native pests on the Indiana bat.

Low-impact (dispersed) recreational uses of these prescription areas are compatible with the long-term conservation of the Indiana bat. These include hiking, hunting, backpacking, picnicking, photography, and wildlife study. Existing trails and roads are used for access to specified areas for these activities, although decommissioning of existing roads may occur. Off-road vehicle use is prohibited. Educational materials describing the Indiana bat, its geographical distribution, its habitat, fragility, and conservation efforts are readily available to visitors of the area. The Indiana bat is actively protected against collection and killing, except for specified scientific purposes. Trail and road reconstruction, minor relocation, and new parking facilities are permitted. All activities are conducted with full consideration of effects on Indiana bat populations.

8E4 - Indiana Bat Hibernacula Protection Areas

Standards

Forestwide standards for protection and management of the Indiana bat are supplemented in this prescription area by the following standards specific to cave-associated habitats.

When not specifically stated otherwise, these standards refer to both the primary (8E4a) and secondary (8E4b) cave protection areas.

Primary Cave Protection Area

8E4-001 Each Indiana bat hibernaculum will have a primary buffer consisting of a radius of no less than one half mile around each hibernaculum, defined by national forest surface ownership and topography.

8E4-002 No disturbance that will result in the potential taking of an Indiana bat will occur within this buffer.

- Commercial timber harvesting, road construction, use of the insecticide diflubenzuron, creation of early successional habitat, expansion or creation of permanent wildlife openings, and mineral exploration and development are prohibited.
- Prescribed burning, tree cutting, road maintenance, and integrated pest management using biological or species-specific controls are evaluated during project level analysis to determine the direct, indirect, and cumulative effects on Indiana bats and the hibernacula.

8E4-003 All currently known hibernacula are gated. If additional hibernacula are found, the caves are gated, if necessary, to protect Indiana bats during the critical hibernation period.

8E4-004 All caves may be opened for public use during the summer months for recreational use from June 1 to September 1.

Secondary Cave Protection Area

8E4-005 A secondary buffer consisting of a radius of approximately 1½ miles around each **primary cave protection area**, defined by easily recognizable features on the ground, will have limited disturbance.

8E4-006 Within the **secondary cave protection area**, the following management activities can occur following evaluation to determine the direct, indirect, and cumulative effects on Indiana bats and the hibernacula:

- Regeneration timber sales;
- Thinning;

- Road construction or reconstruction;
- Prescribed burning;
- Trail construction or reconstruction;
- Special uses; and
- Biological or species-specific pesticide use.

Active Maternity Site Protection

8E4-007 If active maternity roost sites are identified on the Forest, they are protected with a 2-mile buffer defined by the maternity roost, alternate roost sites, and adjacent foraging areas. See Forestwide standards.

Active Roost Tree Protection

8E4-008 As active roost trees are identified on the Forest, they are protected with a ¼ mile buffer surrounding them. This protective buffer remains until such time they no longer serve as a roost (e.g., loss of exfoliating bark or cavities, blown down, or decay). See Forestwide standards.

Terrestrial and Aquatic Species

8E4-009 Management for other plant and animal species within the **primary cave protection areas** is evaluated during project level analysis to determine the direct, indirect, and cumulative effects on Indiana bats and the hibernacula.

8E4-010 Opportunities should be sought to include creation of drinking water sources for bats in project plans, where appropriate, in areas where no reliable sources of drinking water are available. Opportunities are considered when the creation is not detrimental to other wetland-dependent species (i.e., damage to natural springs and seeps).

8E4-011 Limit creation of early successional habitat to 10 percent of forested acres in the **secondary cave protection area**. Creation of early successional habitat in the **primary cave protection area** is prohibited.

8E4-012 Existing old fields, wildlife openings, and other habitat improvements for fish and wildlife may be present and maintained within both the **primary and secondary cave protection areas**, but no expansion of openings or creation of new permanent openings of this type occurs within the **primary cave protection area**. Native species are emphasized when establishing food plants for wildlife. Some openings provide permanent shrub/sapling habitat as a result of longer maintenance cycles.

8E4-013 Structural habitat improvements for fish and other aquatic species are allowed.

Threatened, Endangered and Sensitive Species

8E4-014 Management for other known populations of threatened, endangered, sensitive, and locally rare species within the **primary cave protection areas** are evaluated during project level analysis to determine the direct, indirect, and cumulative effects on Indiana bats and the hibernacula.

Rare Communities and Old Growth

8E4-015 Maintain rare communities in both the **primary and secondary cave protection areas**.

8E4-016 Old growth patches of all sizes and community types are maintained and restored.

Vegetation and Forest Health

8E4-017 Allow vegetation management activities within **primary cave protection areas** to:

- Promote trees that retain slabs of exfoliating bark;

- Promote large diameter roost trees with some daily exposure to sunlight;
- Thin dense midstories that restrict bat movement;
- Improve other threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce fuel buildups;
- Restore historic fire regimes, particularly in pine and pine-oak woodlands;
- Reduce insect and disease hazard to oak-hickory forest communities;
- Control non-native invasive vegetation.
- Trail maintenance

8E4-018 Allow vegetation management activities within **secondary cave protection areas** to:

- Maintain oak-hickory forest communities; and restore pine and pine-oak woodlands;
- Promote trees that retain slabs of exfoliating bark;
- Promote large diameter roost trees with some daily exposure to sunlight;
- Thin dense midstories that restrict bat movement;
- Improve other threatened, endangered, sensitive, and locally rare species habitat;
- Maintain rare communities and species dependent on disturbance;
- Reduce fuel buildups;
- Restore, enhance, or mimic historic fire regimes;
- Reduce insect and disease hazard;
- Control non-native invasive vegetation;
- Salvage dead and dying trees as a result of insects, diseases, or other natural disturbance events;
- Provide up to 10% early successional habitat conditions.
- Trail maintenance

8E4-019 Strive for optimum roosting habitat of 16 or more Class 1 and/or Class 2 trees greater than 9 inches d.b.h. per acre, as averaged across the prescription area associated with each hibernaculum. Class 1 trees are those species which are most likely to have exfoliating bark either in life or after death, and which are most likely to retain it for several years after they die. Class 2 trees characteristically have exfoliating bark as well, but are considered to be of slightly lower quality than Class 1 trees. See Table 3-2.

Timber Management

8E4-020 **Primary cave protection areas** are unsuitable for timber production. Commercial timber harvest is not allowed.

8E4-021 **Secondary cave protection areas** are suitable for timber production. The remainder of the standards under this section refers only to the secondary cave protection area.

8E4-022 Clearcutting is prohibited.

8E4-023 In order to promote fall foraging and swarming areas, timber activities will leave all shagbark hickory trees and retain a minimum average of 6 snags or cavity trees (greater than or equal to 9 inches d.b.h.) per acre as potential roost sites (except where they pose a safety hazard). For group selection harvest method, all shagbark hickories are

maintained (except where they pose a safety hazard) with no provision for minimum number of snags or cavity trees due to the small opening size.

8E4-024 Forested communities are maintained using either of two following criteria:

A minimum of 60% of the acreage of all Forest Types are maintained over 70 years of age; and a minimum of 40% acreage of CISC Forest Types 53 (white oak, red oak, hickory) and 56 (yellow poplar, white oak, red oak) are maintained at an age greater than 80 years old;

OR

When the above age criteria cannot be met, forest stands receiving even-aged regeneration harvesting are maintained with a minimum of 20 trees per acre in the 10-16 inch d.b.h. class and 15 trees per acre in the greater than 16 inch d.b.h. class, of which two trees per acre must be 20 inches d.b.h. or greater.

8E4-025 The 0 - 10 age class will not exceed 10% at any time (regardless which of the criteria above are used).

8E4-026 Timber marking and harvesting crews will receive training in the identification of potentially valuable roost trees.

8E4-027 Timber harvesting operations will be suspended from September 15 until November 15.

8E4-028 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	120-140
Cove hardwoods	100-120
White pine	80-100
Yellow pine	80-100
Scarlet oak/Black oak	80-100

Non-timber Forest Products

8E4-029 Do not issue authorizations for the commercial or personal use of any forest products, including firewood.

Prescribed Fire and Unplanned Natural Ignitions Use

8E4-030 Prescribed burning and unplanned natural ignition use is allowed to manage vegetation to maintain flight and foraging corridors in upland and riparian areas potentially used by bats in the summer.

Recreation

8E4-031 Maintain trails to the minimum standard necessary for protection of the soil, water, vegetation, visual quality, user safety, and long-term maintenance.

8E4-032 New trail construction is allowed only within the **secondary cave protection area**.

8E4-033 Licensed OHV use is permitted in this prescription area only on existing open roads.

Scenery

8E4-034 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	M	M	M	M	M

8E4-035 Management activities are designed to meet or exceed a high Scenic Integrity Objective in semi-primitive non-motorized areas within this prescription area.

Range

8E4-036 In order to maintain open woodland and grassland conditions suitable for fall swarming and roosting, livestock grazing is permitted to continue where it currently exists.

Minerals

8E4-037 The **primary cave protection areas** are administratively unavailable for oil and gas and other Federal leasable minerals. Existing leases are not renewed upon expiration. These areas are not available for mineral materials for commercial, personal, or free use purposes. Administrative use of mineral materials is allowed when: a) the materials are used within the primary cave protection area itself; and b) use is necessary to protect Indiana bat habitat.

8E4-038 Within the **secondary cave protection areas**, oil and gas are allowed with a timing stipulation to protect Indiana bat habitat from September 15 to November 15. Other Federal minerals are allowed on a case-by-case basis after full consideration of effects on Indiana bat habitat. Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect Indiana bat habitat.

8E4-039 The Kelly Cave area is underlain by private mineral rights. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to minimize disturbance to Indiana bat habitat when possible.

Roads

8E4-040 Within the **primary cave protection area**, do not permit road construction, subject to valid existing rights or leases. Road reconstruction and minor relocation are permitted to benefit the Indiana bat and its habitat.

8E4-041 New construction and reconstruction are allowed in the **secondary cave protection area**.
SUITABLE USE

8E4-042 Decommission roads when adversely affecting caves, their hydrology, or Indiana bat habitat security.

Lands and Special Uses

8E4-044 **Primary cave protection areas** are unsuitable for new special uses, except for research and outfitter-guide operations. Phase out existing non-conforming uses.

8E4-045 Allow commercial use by outfitters and guides if compatible with preservation of the **primary cave protection areas**. Do not allow contest events such as foot races or horseback endurance events. Require outfitters and guides to use leave-no-trace techniques. Do not allow permanent camps.

8E4-046 Within **secondary cave protection areas**, new special use proposals are analyzed on a case-by-case basis to determine the potential effects on the Indiana bat.

8E7 SHENANDOAH MOUNTAIN CREST

Nearly the entire known range of the Cow Knob salamander (*Plethodon punctatus*) occurs on the George Washington National Forest. This xxx,xxx+-area is located on the North River Ranger District along the crest of Shenandoah Mountain and Great North Mountain, largely above 3,000 feet. Cow Knob salamanders typically reach their highest population densities in older age hardwood forests with abundant large down wood and rock. The U.S. Fish and Wildlife Service and the George Washington National Forest were some of the first federal agencies in the Nation to enter into a Conservation Agreement in 1994, under a multi-agency Memorandum of Understanding, designed to keep an at-risk species from needing to be listed under the Endangered Species Act. This Conservation Agreement, and accompanying Habitat Conservation Assessment, serves as the guide for management of the Cow Knob salamander.

A variety of threatened, endangered, and sensitive species and unique natural communities occur on Shenandoah Mountain. This includes at least 15 species of plants and 13 species of animals plus their associated habitats. This area includes the following Virginia Division of Natural Heritage Conservation sites: Bother Knob/High Knob, Cow Knob, Laurel Run, Little Bald Knob, Maple Spring, Middle Mountain, Puffenbarger, Glade, Reddish Knob, and Skidmore.

Emphasis:

This large area is managed to protect and/or enhance habitat for the Cow Knob salamander and other outstanding natural biological values of the areas. The protection, maintenance and restoration of species, natural communities and ecological processes are the primary objective. Management of the biological resources coexists with dispersed recreation activities as well as other wildlife management activities that are compatible.

Desired Condition

Vegetation types influenced by the natural environmental and ecological processes dominate the landscape. Restoration and maintenance of certain vegetation communities are permitted through prescribed burning or other proven means of controlling natural succession. Inholdings and adjacent lands are acquired as opportunities arise and are considered a priority for acquisition.

Within this area, habitats are managed to maintain or enhance Cow Knob salamander populations and populations of other threatened, endangered, sensitive, and locally rare (TESLR) species, including the Shenandoah Mountain salamander. The landscape character of this area generally consists of a closed forest canopy of late-successional stages of mixed hardwoods on upper slopes combined with coves and riparian areas with eastern hemlock, tulip poplar, and rhododendron thickets. Within this matrix of mostly closed canopy forest is a mosaic of dry oak and yellow pine woodlands in a wide variety of successional stages with a south to west aspect. Abundant ground cover in the form of rocks, down and decaying logs, and leaf litter are maintained and restored. Open grassy, shrubby areas and areas without vegetation, like roads, trails, and utility rights-of-way are minimized, except where desired for certain TESLR species. The landscape of the area retains a natural, forested appearance, and the valued character of the natural evolving landscape is intact with no noticeable deviations. The mix of forest communities varies by landtype association, including mixed mesophytic and mesic oak hickory forests dominated by red, white, chestnut, and black oaks, as well as tulip poplar, sugar and red maples, and hemlocks. The overstory is generally closed in forested conditions with minimal sunlight reaching the forest floor; however, naturally occurring brushy and herbaceous openings may occasionally be found. Natural processes eventually result in a large patch old growth forest matrix throughout much of the area. Cavity trees, standing dead trees, and down logs are common throughout the entire area as a result of natural mortality combined with gypsy moth killed trees. All forested blocks are interconnected by corridors which themselves have a continuous forest cover. Wildlife species associated with area-sensitive mid- to late-successional

deciduous forest habitats expected to inhabit this area include ovenbird, cerulean warbler, and black-billed cuckoo. This management prescription also provides optimal to suitable habitat for black bear and other mid- to late-successional species including southern pigmy shrew, downy woodpecker, eastern gray squirrel, and sharp-shinned hawk. This habitat conservation area is unsuitable for timber production and commercial timber harvest. Removal of non-native vegetation is considered appropriate. Sufficient canopy trees and large woody debris on the forest floor are maintained to reduce drying of subsurface soils. Biological pesticide controls of gypsy moth, hemlock woolly adelgid, and other detrimental species are permitted with full consideration of the effects on the salamanders, TESLR species, their microhabitat, and their prey.

The role of fire in maintaining some natural communities within this area is recognized as an important management tool. Management will include the use of prescribed fire on drier sites supporting rare plants and unique natural communities, including woodlands. Potential effects of prescribed fire should be evaluated during the development of the necessary environmental documentation. Generally, however, fires occur predominately on drier sites where the Cow Knob salamander is absent. Therefore, controlled burns on dry sites supporting rare plants and unique natural communities appear to be compatible with salamander conservation.Unplanned ignitions may be used under certain conditions to create or maintain habitat needed by TESLR species and rare communities where appropriate. Fire suppression efforts will use the least impact methods available to control the fire.

Low-impact (dispersed) recreational uses of the area are compatible with the long-term conservation of the Cow Knob salamander. These include hiking, hunting, backpacking, picnicking, photography, and wildlife study. Existing trails and roads are used for access to specified areas for these activities, although decommissioning of existing roads may occur. Mountain bike and horse riding occur only on designated roads and trails. Off-road vehicle use is prohibited. The Cow Knob salamander is actively protected against collection and killing, except for specified scientific purposes. Limited access is provided through portions of the area on Forest Service and State roads with gravel, native, and occasionally paved surfaces. The opportunity to encounter other visitors is high along the roads and at parking areas, pull-outs, and overlooks. Forest visitors on foot, horse, or bicycles experience solitude in portions of this prescription area away from roads. Comfort, sanitation, and camping facilities on Forest Service lands are not provided, although primitive camping can be enjoyed throughout the area. During most of the year, occasional encounters with other forest visitors can be expected, however these encounters are more frequent during spring and fall hunting seasons. Visitors to this area see examples of the natural communities of Shenandoah Mountain. This includes various old growth forest types as well as a mosaic of grass and fern dominated openings with scattered trees along the very crest of Shenandoah Mountain. Dispersed recreation opportunities are provided when in harmony with the special biological values of the area. Mountaintop vistas such as Reddish Knob Observation Site and Flagpole Knob provide sweeping views of the Shenandoah Valley.

Management activities limit negative impacts to Cow Knob salamander populations from permanent and long-term fragmentation, isolation, and edge effects (such as drying from increased insolation, impacts from edge predators, invasion of non-native invasive plants, and increased competition from other salamander species). No new permanent roads are constructed. Restoration of canopy and cover along temporary and decommissioned roads occurs quickly. Canopy closure along road rights-of-way is common. New trails may be constructed if no adverse effect on Cow Knob salamander populations will occur. Trail and road reconstruction, minor relocation, and new parking facilities are permitted. All activities are conducted with full consideration of effects Cow Knob salamander populations.

Standards

Terrestrial and Aquatic Species

8E7-001 Watershed improvement projects are developed and implemented on areas where erosion is man-caused, but not normally undertaken in response to natural processes occurring on the area.

8E7-002 Wildlife management for selected species will be unaffected except for activities that require the alteration of Cow Knob salamander habitat. Removal of hardwood stands, such as in the creation of openings, is inconsistent with the long-term management of salamander populations. Existing and replacement wildlife improvements may be maintained only if their presence does not adversely affect Cow Knob salamander habitat.

8E7-003 The creation of new edge habitat for management of game species should be minimized, and is allowed as a wildlife management tool only in areas of habitat unsuitable for the Cow Knob salamander.

8E7-004 Vegetation may be manipulated for the management of the biological values identified as well as threatened, endangered, or sensitive species and their habitat.

Rare Communities and Old Growth

8E7-005 Large, medium, and small patches of old growth are retained if compatible with the habitat needs of the threatened, endangered, sensitive, and locally rare species.

Vegetation and Forest Health

8E7-006 Native forest insect and disease outbreaks are controlled only to prevent unacceptable damage to resources on adjacent land or to protect threatened, endangered, sensitive, or locally rare species. Non-native, invasive insects and diseases may be eradicated or suppressed to prevent a loss of the special biological community. Favor biological control methods.

8E7-007 Control or eradicate non-native invasive plants using hand-applied chemicals, with Forest Supervisor approval, when necessary.

8E7-008 Control non-native invasive animals, insects, and diseases where they are causing negative effects to rare communities. Do not introduce non-native species in or near rare communities, unless it is a natural enemy of a non-native pest.

8E7-009 Allow native insects and diseases to play their natural ecological role.

Timber Management

8E7-010 These lands are classified as unsuitable for timber production.

8E7-011 Salvage of dead or dying trees using ground-based systems may occur for safety or scenic rehabilitation along open road systems.

8E7-012 Cutting of insect damaged, wind thrown, and fire killed trees which pose a safety or maintenance concern, may be conducted within 100 feet of the center of existing open roads. Non-commercial firewood cutting may be permitted with this same corridor, but only following salamander surveys indicating the area is not of significance to the Cow Knob salamander.

Non-timber Forest Products

8E7-013 Do not permit the collection of non-timber forest products, except for scientific purposes as permitted by the Forest Supervisor.

Prescribed Fire and Unplanned Natural Ignitions Use

8E7-014 Prescribed fire and unplanned natural ignition use are allowed to maintain the Prescription Area emphasis.

8E7-015 Vegetation management may be accomplished with management-ignited prescribed fire, and unplanned natural ignition use.

8E7-016 New plow lines for containing prescribed burns in or near bogs and seasonal ponds are prohibited to avoid disrupting hydrology. Use existing roads, firelines, or streams to contain burns where possible. Favor construction of new firelines by using less intensive methods such as wetline, handline, and cutting back flashy fuels. Heavy mechanized equipment (e.g. bulldozers and tractors) may be used only if compatible with the values for which the SMC-SIA was created.

Recreation

8E7-017 Where recreational uses are negatively affecting threatened, endangered, sensitive, and locally rare species, modify recreation sites or trails to reduce or eliminate negative effects. New and improved recreational developments are designed to avoid adverse effects to threatened, endangered, sensitive, and locally rare species.

8E7-018 These areas are unsuitable for designation of ATV use areas, unless crossing the area is the only feasible alternative or results in less environmental impact.

8E7-019 Motorized vehicular (OHV) access should be limited to existing areas designated for that purpose.

8E7-020 The Shenandoah Crest area is managed under the recreation opportunity classes identified in the Forest recreation opportunity map accompanying the Revised Plan.

8E7-021 Where appropriate, interpretive services (trails, signs, viewing areas) are provided to enhance visitors' understanding and apprectation of the area's special values.

8E7-022 Trails and other reacreation facilities are located to minimize impacts occurring to the natural values of the established area.

8E7-023 Vistas and associated turn-outs may be maintained or increased where compatible with biological values.

Scenery

8E7-024 All management activities will meet or exceed a Scenic Integrity Objective of High.

Minerals

8E7-025 These areas are available for federal oil and gas leasing with controlled surface use to protect threatened, endangered, sensitive, and locally rare species. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on threatened, endangered, sensitive, and locally rare species.

8E7-026 Permit mineral materials for commercial, personal, free, and administrative use purposes with conditions to protect threatened, endangered, sensitive, and locally rare species habitat.

8E7-027 Federal oil and gas leases exist in some of these areas. Roads, wells, and other necessary infrastructure associated with these leases are allowed. Existing lease stipulations are used to minimize disturbance to threatened, endangered, sensitive, and locally rare species habitat.

8E7-028 Private mineral rights exist in some of these areas. Roads, wells, and other necessary infrastructure associated with these rights are allowed. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and

reasonable access is granted. Encourage such interests to minimize disturbance to threatened, endangered, sensitive, and locally rare species habitat.

Roads

8E7-029 Only permit road construction to access valid existing rights and mineral leases.

8E7-030 Existing roads may be maintained, and motorized travel should be limited to open road systems. Construction of new roads of any kind is not permitted in the SMA-SIA.

8E7-031 Motorized public travel is restricted to current open system roads.

8E7-032 Reconstruction, minor relocation and construction of parking facilities are permitted where compatible with biological values.

Lands and Special Uses

8E7-033 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites unless there is an over-riding demonstrated public need or benefit. Existing uses may continue unless removal is necessary to protect threatened, endangered, sensitive, and locally rare species.

8E7-034 These areas are unsuitable for designation of wind energy development.

8E7-035 These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites. Existing uses may continue after evaluation of the impacts to the rare community.

8E7-036 Allow commercial use by outfitters and guides if compatible with preservation of the rare community values. Do not allow contest events such as foot races or horseback endurance events. Require outfitters and guides to use leave-no-trace techniques. Do not allow permanent camps.

8E7-037 Vegetation within existing corridors is maintained in a grass/shrub type by mowing, hand cutting or use of selective herbicide treatments, except in areas inaccessible or too remote.

11 Riparian Corridors – Streams, Lakes, Wetlands, and Floodplains

Riparian Areas are functionally defined as areas with three-dimensional ecotones of interaction that include both terrestrial and aquatic ecosystems. They extend down into the groundwater, up above the canopy, outward across the floodplain, up the near-slopes that drain into the water, laterally into the terrestrial ecosystem, and along the watercourse at a variable width[7]. (For an operational definition of a riparian area based on soils, vegetation, and hydrologic characteristics see Appendix "xx".) A *riparian corridor* is a management prescription area designed to include much of the Riparian Area. Within the riparian corridor management prescription area, management practices are specified to maintain riparian functions and values. As a management prescription area, this includes corridors along all defined perennial and intermittent stream channels that show signs of scour, and around natural ponds, lakeshores, wetlands, springs, and seeps. (See Appendix "xx" for a graphical representation of a riparian corridor.)

Emphasis:

Riparian corridors are managed to retain, restore, and/or enhance the inherent ecological processes and functions of the associated aquatic, riparian, and upland components within the corridor. Primarily, natural processes (floods, erosion, seasonal fluctuations, etc.) modify most of the areas

within the riparian corridor. However, management activities may be used to provide terrestrial or aquatic habitat improvement, favor recovery of native vegetation, control insect infestation and disease, comply with legal requirements (e.g. Endangered Species Act, Clean Water Act), provide for public safety, and to meet other riparian functions and values. Silvicultural treatments including timber and vegetation removal may occur to restore and/or enhance riparian resources such as water, wildlife, and natural communities.

Desired Condition

Riparian corridors reflect the physical structure, biological components, and ecological processes that sustain aquatic, riparian, and associated upland functions and values. The preferred management for riparian corridors is one that maintains, or moves toward, the restoration of processes that regulate the *environmental and ecological components of riparian areas*. However, due to the high value that these areas have for many uses, evidence of human activity (developed recreation areas, roads and trails, dams and reservoirs, and pastoral areas) may be present.

Riparian corridors are managed to emphasize the maintenance, restoration, and enhancement of habitat for species that depend on riparian resources for at least a part of their life-cycle. Management may also occur to maintain, restore, or enhance habitat for other species that benefit from riparian resources as long as the needs of species that depend on riparian resources for at least a part of their life-cycle are met.

The soils of riparian corridors have an organic layer (including litter, duff, and/or humus) of sufficient depth and composition to maintain the natural infiltration capacity, moisture regime, and productivity of the soil (recognizing that floods may periodically sweep some areas within the floodplain of soil and vegetation). Exposed mineral soil and soil compaction from human activity may be present but are dispersed and do not impair the productivity and fertility of the soil. Any human-caused disturbances or modifications that cause environmental degradation through concentrated runoff, soil erosion, or sediment transport to the channel or water body are promptly rehabilitated or mitigated to reduce or eliminate impacts.

Trees within the corridors are managed to provide sufficient amounts and sizes of woody debris to maintain habitat complexity and diversity for aquatic and riparian wildlife species. Recruitment of woody debris typically occurs naturally; however, woody debris may be purposefully introduced to enhance aquatic and terrestrial habitat. Both in-stream and terrestrial woody debris are regarded as essential and generally left undisturbed.

The riparian corridor functions as a travel-way for aquatic and terrestrial organisms. The corridor serves as a connector of habitats and populations allowing gene flow to occur, thus keeping populations genetically viable. Stream structures -- such as bridges, culverts, and aquatic habitat improvement structures -- may be evident in some streams and water bodies. With the exception of some dams, most structures do not decrease in-stream connectivity.

Suitable habitat is provided in the riparian corridor for riparian flora and fauna; especially threatened, endangered, sensitive (TES) and locally rare species. Vegetation (dead and alive) reflects the potential natural diversity of plant communities with appropriate horizontal and vertical structure needed to provide the shade, food, shelter, and microclimate characteristics for aquatic and terrestrial species. Rehabilitation of past and future impacts (both natural and human-caused) may be necessary to protect resource values and facilitate recovery of riparian structure and functions.

Vegetative communities within the riparian corridor are diverse and productive, providing for a rich variety of organisms and habitat types. The vegetative community within the riparian corridor is predominately forested; however, some native non-forested communities such as wet meadows and grass or shrub dominated plant communities may occur. The desired vegetative condition of non-forested communities is determined by site-specific analysis.

The forest contains multiple canopy layers, which provide diverse habitat structure, and thermal and

protective cover for wildlife. Snags used by birds, bats, and other small animals are abundant. Dying and down trees are common, often in naturally occurring patches. Wet meadows, non-forest communities, and open forest canopies, created by flooding, wind damage, wildland fire, insect infestations, disease, restoration, and vegetation management may be seen.

Vegetation management activities are stratified into two sections of the riparian corridor. The core of the corridor is the area within 100 feet each side of perennial streams, lakes, ponds and wetlands and the area within 50 feet each side of intermittent streams. Within the core of the riparian corridor, vegetation management activities, including prescribed fire, may take place to maintain, restore, and/or enhance the diversity and complexity of native vegetation, rehabilitate both natural and human-caused disturbances, and provide habitat improvements for aquatic and riparian- associated wildlife species (including migratory birds), provide for visitor safety, or to accommodate appropriate recreational uses. Silvicultural treatments, including timber and vegetation removal, may occur within the riparian corridor, but the corridor will be classified as not suitable for timber production.

When slopes exceed ten percent the riparian corridor is extended beyond the core area. Within this extended portion of the corridor vegetation management activities may take place to meet the objectives of the adjacent management prescription. However, these activities will be constrained by the standards in this riparian corridor prescription. Silvicultural treatments, including timber and vegetation removal, may occur within the extended section of the corridor. This extended section of the corridor can be classified as suitable for timber production if the adjacent management prescription is suitable. Prescribed fire can be used within the corridor to create or maintain the composition and vitality of fire-dependent vegetative communities.

The landscape character is natural evolving or natural appearing, but occasional enclaves of a rural landscape character may occur with pastoral settings and recreation developments (such as a swim beach at a campground). Livestock grazing may occur, but it is managed to minimize impacts on stream banks, water quality, and other riparian resources.

Both dispersed and developed recreation opportunities may be present within these corridors. Although recreational areas and facilities may create long-term impacts on riparian corridors, allowances are made in this prescription since a majority of recreation within the national forests occurs in or near water bodies. Hiking, dispersed camping, hunting, and fishing are typical activities available within the corridor. Visitors may encounter developed camping areas, boat launches and fishing piers. Current recreation areas and facilities are managed to minimize impacts on stream banks, shorelines, and water quality. New recreation facilities will be developed in accordance with Executive Orders 11988 and 11990 to minimize impacts on the riparian resource. Environmental education and interpretation about the aquatic component and riparian corridor may be provided to increase awareness of the value of riparian resources.

Desired Conditions for Aquatic Systems Within the Riparian Corridor

Streams are in dynamic equilibrium; that is, stream systems normally function within natural ranges of flow, sediment movement, temperature, and other variables. The geomorphic condition of some channels may reflect the process of long-term adjustment from historic watershed disturbances (e.g., past intensive farming or logging practices). The combination of geomorphic and hydrologic processes creates a diverse physical environment, which, in turn, fosters biological diversity. The physical integrity of aquatic systems, stream banks and substrate, including shorelines and other components of habitat is intact and stable. Where channel shape is modified (e.g., road crossings), the modification preserves channel stability and function.

The range of in-stream flows is maintained to support channel function, aquatic biota and wildlife habitat, floodplain function, and aesthetic values. Water uses and other modifications of flow regimes are evaluated in accordance with the national Forest Service in-stream flow strategy and site-specific analysis.

Water quality remains within a range that ensures survival, growth, reproduction, and migration of aquatic and riparian wildlife species; and contributes to the biological, physical, and chemical integrity of aquatic ecosystems. Water quality meets or exceeds State and Federal standards. Water quality (e.g.: water temperature, sediment level, dissolved oxygen, and pH) will be improved where necessary to benefit aquatic communities.

Floodplains properly function as detention/retention storage areas for floodwaters, sources of organic matter to the water column, and habitat for aquatic and riparian species. Modification of the floodplain is infrequent but may be undertaken to protect human life and property or to meet other appropriate management goals (e.g., restoration). There may be evidence of some roads, trails, and recreation developments. Some wetland habitats may show signs of restoration.

The biological integrity of aquatic communities is maintained, restored, or enhanced. Aquatic species distributions are maintained or are expanded into previously occupied habitat. The amount, distribution, and characteristics of aquatic habitats for all life stages are present to maintain populations of indigenous and desired nonnative species. Habitat conditions contribute to the recovery of species under the Endangered Species Act. Species composition, distribution, and relative abundance of organisms in managed habitats is comparable to reference streams of the same region. Some streams and lakes, however, may be stocked with non-native fish by the respective State natural resource agency.

11 - Riparian Corridors – Streams, Lakes, Wetlands, and Floodplains

Standards

Standards refer to the entire riparian corridor (core and extended area) unless specified otherwise.

General

11-xxx NEW STANDARD: In cold water stream habitats, activities that unfavorably affect trout spawning should be avoided from October 1 to April 1 in brook trout and brown trout streams and/or March 15 to May 15 in rainbow trout streams.

11-001 Any human caused disturbances or modifications that may concentrate runoff, erode the soil, or transport sediment to the channel or water body are rehabilitated or mitigated to reduce or eliminate impacts. Channel stability of streams is protected during management activities.

11-002 Motorized vehicles are restricted to designated crossings. Access for motorized vehicles may be allowed on a case-by-case basis, after site-specific analysis, outside of designated crossings where it can be shown to benefit riparian resources.

11-003 Management activities expose no more than 10 percent mineral soil within the project area riparian corridor.

Aquatic Habitats within Streams and Rivers

11-004 The removal of large woody debris (pieces greater than 4 feet long and 4 inches in diameter on the small end) is allowed if it would otherwise pose a risk to water quality, degrades habitat for aquatic or riparian wildlife species, impedes water recreation (e.g. rafting) or when it poses a threat to private property or Forest Service infrastructure (e.g. bridges). The need for removal must be determined on a case-by-case basis.

11-005 The addition of large woody debris for stream habitat diversity will generally favor stream reaches with an average bank full width of less than 30 feet in Rosgen B channel types. Log length will generally be 50% greater than bank full width. In stream reaches where

there may be potential debris impacts to downstream private or public infrastructure (e.g., bridges) or to water-based recreation (e.g. rafting), the active recruitment (placement) of large woody debris will be limited in quantity and scope.

11-006 Stocking of new nonnative species and stocking of previously unstocked areas is not allowed where it will negatively impact native aquatic species or communities. Prior to any stocking, national forests coordinate with the appropriate State and Federal agencies to ensure that populations and habitats of native species are maintained.

11-007 Restoration of chemical integrity of aquatic ecosystems (from impacts such as acid deposition and acid mine drainage) is allowed on a site-specific basis for protection or for restoration of aquatic species.

11-008 Instances where the flow regime is modified for other purposes (such as reservoir releases for recreational sports or hydroelectric demand), evaluate instream flow needs in accordance with the national strategy for water rights and instream flows.

11-009 In-stream habitat improvements, and stream-connected disturbance will be designed and implemented after consideration of the life-cycle requirements of at risk species or species of management concern.

Terrestrial Species

11-010 Existing permanent wildlife openings may be maintained within the riparian corridor. However, permanent wildlife openings identified as causing environmental degradation through concentrated runoff, soil erosion, sediment transport to the channel or water body are mitigated or closed and restored. New permanent wildlife openings within the riparian corridor are permitted where needed to provide habitat for riparian species, or threatened, endangered, sensitive, and locally rare species.

11-011 Use no-till mechanical cultivation methods for maintenance of wildlife openings.

11-012 Up to 2 percent early successional forest habitat may be created when the riparian corridor falls within the Ruffed Grouse/Woodcock Habitat (measured within riparian corridor across geographically contiguous prescription block).

Rare Communities and Old Growth

11-013 Management actions that may negatively alter the hydrologic conditions of wetland rare communities are prohibited. Such actions may include livestock grazing and construction of roads, plowed or bladed firelines, and impoundments in or near these communities. Exceptions may be made for actions designed to control undesirable impacts caused by beavers, or where needed to control fires to provide for public and employee safety and to protect adjacent private land resources. Beaver impoundments may be removed if they are negatively affecting federally listed species.

11-014 Introducing fish into wetland rare communities is prohibited.

11-015 ~~Canebrake restoration efforts may occur on sites currently supporting cane (*Arundinaria gigantea* or *A. tecta*) and may occur on sites known to historically support cane. Management actions will be designed to increase the vigor, density, and area of existing patches of cane. Actions used to restore canebrakes will include prescribed burning on a 7 to 10 year return cycle, control of competing vegetation, and overstory reduction or removal.~~ This is not applicable on the GWNF.

Vegetation and Forest Health

11-016 Insect and disease control measures will be determined on the basis of risk to adjacent resources, long-term sustainability, and appropriate needs for the function and condition of the riparian area. When cutting is an appropriate control tactic, cut and leave is the preferred method for control and suppression of insects and disease in the core of the riparian corridor. Cut and remove is permitted in the extended area beyond the core.

Other control measures may be used when a condition poses a risk to stream stability, degrades water quality, adversely affects habitat for aquatic or riparian species, poses a threat to public safety or facilities, or when "cut and leave" is not effective.

11-017 Tree removals from the core of the riparian corridor may only take place if needed to:

- Enhance the recovery of the diversity and complexity of vegetation native to the site;
- Rehabilitate both natural and human-caused disturbances;
- Provide habitat improvements for aquatic or riparian species, or threatened, endangered, sensitive, and locally rare species;
- Reduce fuel buildup;
- Provide for public safety;
- For approved facility construction/renovation; or
- As allowed in standards 11-012 and 11-022.

11-018 Tree removals from the extended area beyond the core of the riparian corridor may take place to meet the objectives of the adjacent management prescription.

Timber Management

11-019 Lands in the core of the riparian corridor are classified as not suitable for timber production. Vegetation management may be accomplished with commercial timber sales when that is the most practical or economically efficient method.

11-020 Lands in the extended area beyond the core of the riparian corridor are suitable for timber harvest when the adjacent management prescription is also suitable.

11-021 When timber harvest occurs in the extended area beyond the core of the riparian corridor for purposes of meeting the objectives of the adjacent management prescription, then vehicles will be excluded from the extended area.

11-022 Corridors for cable logging in areas adjacent to the riparian corridor may cross the riparian corridor. Crossing will be at as near a right angle as possible, with full suspension preferred.

11-023 In cable logging, when full suspension is not possible, partial suspension is allowed with armoring when yarding logs across perennial and intermittent streams.

Non-timber Forest Products

11-024 Do not permit commercial collection of botanical products in the riparian corridor if it would adversely affect the functions and values of the riparian area.

11-025 Permitted firewood cutting within the riparian corridor must take into consideration large woody debris needs. Ranger Districts will identify areas where firewood cutting is not permitted due to large woody debris concerns.

Wildland Fire Management

11-026 Fire retardants should not be applied directly over open water.

11-027 Use existing fire barriers; such as streams, roads, trails, etc. for control lines where possible.

11-028 When necessary to construct fire lines with heavy equipment (e.g., bulldozers) that cross riparian areas and streams, construct turnouts that will allow runoff to be dispersed and infiltrated into the soil before reaching the stream, and then cross stream at right angle. These fire lines should be stabilized and/or revegetated as soon as possible after the fire is controlled.

Prescribed Fire and Unplanned Natural Ignitions Use

11-029 Plan prescribed fires to use existing barriers, e.g., streams, lakes, wetlands, roads, and trails, to reduce the need for fire line construction.

11-030 Construction of firelines with heavy mechanized equipment (e.g. bulldozers) in riparian corridors is prohibited. Hand lines, wet lines, or black lines are used to create firelines within the riparian corridor to minimize soil disturbance. Water diversions are used to keep sediment out of streams. Firelines are not constructed in stream channels, but streams may be used as firelines.

Recreation

11-031 New trails will normally be located outside of the riparian corridor except at designated crossings or where the trail location requires some encroachment (e.g. to accommodate stream crossings in steep terrain, etc.), or to manage access to water bodies.

11-032 New motorized trails are prohibited within the riparian corridor except at designated crossings or where the trail location requires some encroachment; for example, to accommodate steep terrain. When existing OHV trails within riparian corridor are causing unacceptable resource damage, appropriate mitigation measures (which may include OHV trail closure) will be implemented.

11-033 Motorized and non-motorized trail reconstruction and relocation within the riparian corridor are allowed to reduce impacts to riparian and aquatic resources.

11-034 Proposed recreation facilities will be located outside of the riparian corridor or 100-year floodplain (Executive Order 11988) and wetlands (Executive Order 11990) unless no practicable alternative location exists. Where future facilities cannot be located out of the 100-year floodplain, structural mitigation and best management practices will be used. Trails, campsites, and other recreational developments are located, constructed, and maintained to minimize impacts to channel banks and to prevent other resource damage. When existing facilities are causing unacceptable resource damage, appropriate mitigation measures will be implemented. Soils are stabilized on eroding trails and recreational sites.

11-035 Where a riparian area is identified as vulnerable to environmental impacts, camping trailers and vehicles should not be allowed within 50 feet of perennial streams or lakes, except at designated areas.

11-036 Overnight tethering or corralling of horses or other livestock is not allowed within 50 feet of stream courses or lakes. Existing corral sites are maintained to limit impacts to water quality and riparian corridors until alternative sites are developed.

Scenery

11-037 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	H	H	H	H	H

Range

11-038 Where grazing is currently allowed and under a permit, grazing is controlled and mitigated to restore, maintain or enhance the integrity of stream channels and banks and prevent unacceptable resource damage. Reauthorizing grazing in riparian corridors within these

existing allotments may occur if continued grazing would have no unacceptable resource damage on riparian resources. New grazing allotments or new permits for inactive allotments will exclude the riparian corridor.

11-039 Where authorized by permit, livestock watering areas, stream crossings, and stream banks are managed to maintain bank stability. Designated entry points, crossings, and watering points are located, sized, and maintained to minimize the impact to riparian vegetation and function.

11-040 Feeding troughs and salt and mineral blocks are not allowed inside the riparian corridor unless the entire pasture is within the riparian corridor, in which case they are located as far away from streams as possible. Watering troughs are appropriately located to protect the streams.

Minerals

11-041 The riparian corridors are available for federal oil and gas leasing with a controlled surface use stipulation to protect riparian resources and values. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on the riparian corridor.

11-042 Federal oil and gas leases exist within these corridors. Roads, wells, and other necessary infrastructure associated with these leases are allowed. Existing lease stipulations are used to protect the riparian corridor.

11-043 These corridors are not available for commercial or personal mineral materials. Administrative and free use of mineral materials is allowed only to restore riparian areas and aquatic habitat, control erosion and sedimentation, and repair flood damage.

11-044 Private mineral rights exist in some riparian corridors across the GW National Forest. Roads, wells, and other necessary infrastructure associated with these rights are allowed. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted. Encourage such interests to minimize disturbance of riparian resources and values.

Roads

11-045 New roads are located outside the riparian corridor except at designated crossings or where the road location requires some encroachment; for example to accommodate steep terrain, or are allowed within the corridor if the road will cause more resource damage if it were located outside the corridor. When existing roads within riparian corridor are causing unacceptable resource damage, appropriate mitigation measures will be implemented.

11-046 In-stream use of heavy equipment or other in-stream disturbance activities is limited to the amount of time necessary for completion of the project. Construction of crossings is completed on all streams as soon as possible after work has started on the crossing. Permanent and temporary roads on either side of stream crossings within the riparian corridor are graveled.

11-047 When constructing roads, each road segment will be stabilized prior to starting another segment. Stream crossings will be stabilized before road construction proceeds beyond the crossing.

11-048 To minimize the length of streamside disturbance, ensure that approach sections are aligned with the stream channel at as near a right angle as possible. Locate riparian corridor crossings to minimize the amount of fill material needed and minimize channel impacts. Generally, permanent structures or temporary bridges on permanent abutments are provided when developing new crossings on perennial streams. Permanent structures, temporary bridges or hardened fords are used when crossing intermittent streams.

11-049 Design structures (culverts, bridges, etc.) to accommodate storm flows expected to occur while the structures will be in place. Use scientifically accepted methods for calculating expected storm flows.

11-050 Design crossings so stream flow does not pond above the structure during normal flows in order to reduce sediment deposition immediately above the crossing and maintain the channel's ability to safely pass high flows.

11-051 Design the crossing so that stream flow will not be diverted along the road if the structure fails, plugs with debris, or is over-topped.

11-052 If culverts are removed, stream banks and channels must be restored to a natural size and shape. All disturbed soil must be stabilized.

11-053 Fords associated with new road construction are not used in perennial streams without site-specific environmental analysis. Establish fords only under conditions that will not cause significant streambank erosion. Erosion stone or larger rock is used to increase load bearing strength at the water/land interface.

11-054 All new stream crossings will be constructed to allow the passage of aquatic organisms, and maintain natural flow regime. Exceptions may be allowed in order to prevent the upstream migration of undesired species.

Lands and Special Uses

11-055 Riparian corridors are generally unsuitable for new human created stream channel impoundments, but may be considered on a project specific basis, consistent with appropriate Federal and state regulations. Impoundments will generally be designed to allow complete draining, with minimum flows, cold-water releases, and re-aeration in trout waters and other specific waters when needed. Downstream catch basins and fish ladders are constructed for fish salvage/passage, if necessary. New human-constructed impoundments are unsuitable on streams where federally listed species will be negatively affected.

Other Ground Disturbing Activities

11-056 For activities not already covered in the above standards, ground disturbing activities are allowed within the corridor if the activity will cause more resource damage if it were located outside the corridor, on a case-by-case basis following site-specific analysis. Any activity allowed under these conditions is minimized and effective sediment trapping structures such as silt fences, brush barriers, **MODIFICATION:** ~~hay~~ straw (has less potential for invasive species seeds) bale barriers, gravelling, etc., are required. Sediment control, prior to, or simultaneous with, the ground disturbing activities, is provided.

Channeled Ephemeral Zones

The following standards apply to 25 feet on each side of a channeled ephemeral stream and 25 feet upstream for the point at which the scoured channel begins (the "nick point").

FW-12: Motorized vehicles are restricted in the channeled ephemeral zone to designated crossings. Motorized vehicles may only be allowed on a case-by-case basis, after site-specific analysis, in the channeled ephemeral zone outside of designated crossings.

FW-13: Management activities expose no more than 10% mineral soil in the channeled ephemeral zone.

FW-14: Up to 50% of the basal area may be removed down to a minimum basal area of 50 square feet per acre. Removal of additional basal area is allowed on a case-by-case basis when needed to benefit riparian-dependent resources.

FW-15: Permitted firewood cutting within the channeled ephemeral zone must take into consideration large woody debris needs. Ranger Districts will identify areas where firewood cutting is not permitted due to large woody debris concerns.

FW-16: At least partial suspension is required when yarding logs over channeled ephemerals.

FW-17: Large woody debris may be removed if it would otherwise pose a risk to water quality, degrades habitat for aquatic or riparian wildlife species, impedes water recreation (e.g. rafting), or when it poses a threat to private property or Forest Service infrastructure (e.g. bridges). The need for removal is determined on a case-by-case basis.

FW-18: The addition of large woody debris in channeled ephemeral reaches will primarily be through passive recruitment rather than active placement.

FW-19: New human-constructed impoundments are allowed on a case-by-case basis, following evaluation of downstream instream flow needs.

FW-20: When crossing channeled ephemeral streams, culverts, temporary bridges, hardened fords, or corduroy are used where needed to protect channel or bank stability.

FW-21: Construction of crossings is completed on all channeled ephemerals as soon as possible after work has started on the crossing. Permanent and temporary roads on either side of crossings within the channeled ephemeral zone are graveled.

FW-22: If culverts are removed, banks and channel must be restored to a natural size and shape. All disturbed soil must be stabilized.

FW-23: Trails, campsites, and other recreational developments are located, constructed, and maintained to minimize impacts to channel banks and to prevent other resource damage. When existing facilities are causing unacceptable resource damage, appropriate mitigation measures will be implemented. Soils are stabilized on eroding trails and recreational sites.

FW-24: New non-motorized trail construction is allowed to improve existing trail configuration and improve access.

FW-25: New motorized trails are prohibited within the channeled ephemeral zone except at designated crossings or where the trail location requires some encroachment; for example, to accommodate steep terrain.

FW-26: Motorized and non-motorized trail reconstruction and relocation within the channeled ephemeral zone are allowed to reduce impacts to riparian and aquatic resources.

FW-27: Where grazing is currently allowed and under a permit, control and mitigate to restore, enhance, or maintain the integrity of channels and banks. Grazing permit reauthorization is allowed, provided progress towards mitigation of negative impacts on the channeled ephemeral zones has occurred. New grazing permits will be designed to prevent negative impacts to the channeled ephemeral zone. Livestock will be excluded from channeled ephemeral zones whenever the zone cannot be maintained or restored otherwise.

FW-28: Feeding troughs and salt and mineral blocks are not allowed inside the channeled ephemeral zone. Watering troughs are appropriately located to protect the streams.

FW-29: During prescribed fire operations in the channeled ephemeral zone, use the least ground disturbing method of fireline construction, favoring blacklines and handtools.

FW-30: Do not disk, blade, or plow fireline within the ephemeral stream channels, use them as natural firebreaks. (This applies to the actual stream channel, not the entire 25 foot zone.)

FW-31: Revegetate and waterbar firelines as quickly as possible, where necessary to prevent erosion. Use water diversions to keep sediment out of channels.

Other Guideline Sources
George Washington and Jefferson National Forests Federally Listed Threatened and Endangered Mussel and Fish Conservation Plan (March, 2004)
Virginia's Forestry Best Management Practices for Water Quality (July 2002)
West Virginia Silvicultural Best Management Practices for Controlling Soil Erosion and Sedimentation from Logging Operations (2005)

12D - Remote Backcountry Management Prescription Areas

These are the remote areas (xxx.xxx acres) of the Forest outside of wilderness. Included are the following areas: Adams Peak, Beards Mountain, Big Schloss, Crawford Mountain, Church Mountain, Beech Lick Knob, Shenandoah Mountain (WV), Dolly Anne, High Knob, Elliott Knob, Gum Run, Jerkemtight, Kelley Mountain, Little Alleghany, Little River, Mill Mountain, Northern Massanutten, Oak Knob, Oliver Mountain, Lynn Hollow, Bald Ridge, Lick Run, Paddy Mountain (Lee), Rough Mountain, Laurel Fork, West Blue Ridge (Whites Peak), North Mountain (Lee), Vesuvius, Southern Massanutten, The Friars, and Three Sisters.

Emphasis:

Recreation opportunities are provided in large remote areas where users can obtain a degree of solitude and the environment can be maintained in a near-natural state. There is little evidence of humans or human activities other than recreation use and nonmotorized trails. These areas are generally 2500 acres or greater in size, unless the area is adjacent to a wilderness or other backcountry recreation area.

Desired Condition:

These areas provide large tracts of backcountry recreation opportunities with a semiprimitive emphasis that allow limited motorized access. Visitors will be able to choose from a variety of predominately non-motorized recreation opportunities such as hiking, backpacking, mountain bike riding, horseback riding, rock climbing, nature study, hunting, and fishing. Limited motorized activities are also available including dispersed camping, pleasure driving.. New motorized uses are not provided. Closed roads are available for both non-motorized uses as well as administrative access.

These areas are managed and monitored to absorb low to moderate levels of recreation use while protecting air, soil, vegetation, and water resource conditions. Limitations of use will occur if the dispersed activity results in, or is expected to result in, negative affects to the local ecosystem. Human activities may be evident in some places. Visitors will occasionally see other people, especially near the few open roads in these areas. Outdoor skills will be important for visitors in the more remote portions of these areas.

The landscapes of these areas are primarily shaped by natural processes (floods, storms, insects, diseases, and fires). Landscapes feature a structurally diverse mid- to late successional forest community with a continuous forested canopy, with occasional pastoral and historic/cultural enclaves. The valued character of the natural appearing and cultural landscapes either appears intact or is actually intact. There are no noticeable deviations.

Prescribed fire plays an important role in the maintenance of forested communities found throughout this management prescription. Prescribed fire is used to restore and maintain threatened and endangered species habitats, to ensure the continued presence of fire dependent southern yellow pine ecosystems, to maintain fire-associated forested communities, and to reduce fuel buildups. Naturally ignited wildland fires are used when possible.

A combination of prescribed fire and wildlife habitat improvements maintain some early successional shade intolerant forest communities, however uneven-aged forest communities with intermediate to high shade tolerance dominate the area. Aside from these occasional management activities, natural

processes will eventually result in a large patch old growth forest matrix throughout most of this area interspersed with naturally occurring brushy and herbaceous openings. Cavity trees, cull trees, standing dead trees, and down logs will be common throughout the area as a result of natural mortality. Occasional large openings of early successional habitat may be created through natural disturbance.

Wildlife openings and old field habitats are maintained in a grass/forb or shrub/scrub condition. Wildlife species associated with area-sensitive mid- to late successional deciduous forest habitats expected to inhabit this area include ovenbird, cerulean warbler, black-billed cuckoo, and Swainson's warbler. This management prescription also provides optimal to suitable habitat for other mid- to late-successional species including hooded warbler, southern pigmy shrew, downy woodpecker, eastern gray squirrel, eastern fox squirrel, and sharp-shinned hawk. In addition, the distribution of these areas will provide denning sites and remote habitat conditions for black bear within its range. The protection of rare communities and species associates will be provided, along with protection measures for population occurrences for threatened, endangered, sensitive, and locally rare species.

Standards

Terrestrial and Aquatic Species

12D-001 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

Rare Communities and Old Growth

12D-002 Rare communities requiring disturbance are maintained through unplanned natural ignition use, prescribed fire, or felling and leaving of trees.

Vegetation and Forest Health

12D-003 Allow control of insect and disease outbreaks when necessary to protect the scenic and recreational values, to reduce hazards to visitors, or for safety and legal reasons. When actions are needed, first consider biological controls, secondly hand-control methods, and finally pesticides. Utilize the least ecologically disruptive technique that will accomplish control of the pest.

12D-004 Slow-the-Spread, suppression, and eradication of non-native pests are allowed.

12D-005 Tree cutting may occur incidental to other management activities such as trail construction, maintenance, removal of hazard trees, fireline construction, etc. Mechanical equipment such as chainsaws is permitted.

Timber Management

12D-006 These lands are unsuitable for timber production. Timber harvest is generally not allowed, subject to valid existing rights.

12D-007 Timber may be cut, sold, or removed if one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent.

(1) The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the remote area characteristics;

(i) To improve threatened, endangered, proposed, or sensitive species habitat; or

(ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance

regimes of the current climatic period;

(2) The cutting, sale, or removal of timber is incidental to the implementation of a management activity not otherwise prohibited; or

(3) The cutting, sale, or removal of timber is needed and appropriate for personal or administrative use; or

(4) Salvage of dead and dying trees is needed and the remote character of the area is not impaired by the harvest activity.

Non-timber Forest Products

12D-008 Personal use firewood cutting is permitted within 100 feet of roads.

Prescribed Fire and Unplanned Natural Ignitions Use

12D-009 Prescribed fire, unplanned natural ignition use, and associated hand tool or mechanized fire line construction are allowed to reduce wildland fire potential due to high fuel loadings, improve and maintain wildlife habitat, or to benefit fire-dependent and associated species such as table mountain pine and oak forests. Use natural fuel breaks such as streams, roads, rock slides, etc where possible to minimize fireline construction.

Recreation

12D-010 These backcountry recreation areas are managed for the Semi-Primitive Non-Motorized (SPNM) or Semi-Primitive Motorized (SPM) Recreation Opportunities although actual ROS classes range from Semi-Primitive Non-Motorized (SPNM) to Roaded Natural (RN). See ROS Map.

12D-011 New non-motorized trails are allowed. Designation of new trails on case-by-case basis when there is a demonstrated need, interest, a partnership with user group committed to maintenance, and air, soil, vegetation and water resources are protected.

12D-012 Existing motorized roads and trails are monitored for impacts to soil and water quality and problems mitigated. Roads and motorized trails identified as problems are reconstructed, relocated, or decommissioned.

12D-013 Seasonal closures are used when needed to protect soil, water, and wildlife habitat security.

Scenery

12D-014 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	H	H	H	H	H	H

Range

12D-015 Livestock grazing is not permitted.

Minerals

12D-016 These areas are available for federal oil and gas leasing with a no surface occupancy stipulation. Other Federal minerals may be available on a case-by-case basis after full consideration of effects on semi-primitive recreation opportunities and values.

12D-017 These areas are not available for mineral materials for commercial or personal purposes. Administrative or free use of mineral materials is allowed when: a) the materials are used within the backcountry area itself; and b) use is necessary to protect the resources and values of the area.

12D-018 Private mineral rights exist in some areas. Roads, wells, and other necessary infrastructure associated with these rights are allowed. Requests for access to a non-Federal interest in lands pursuant to a reserved or outstanding right are recognized, and reasonable access is granted.

Roads

12D-019 Roads may not be constructed or reconstructed unless:
(1) A road is needed to protect public health and safety in cases of an imminent threat of flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property;

(2) A road is needed to conduct a response action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to conduct a natural resource restoration action under CERCLA, Section 311 of the Clean Water Act, or the Oil Pollution Act;

(3) A road is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty;

(4) Road realignment is needed to prevent irreparable resource damage that arises from the design, location, use, or deterioration of a system road that cannot be mitigated by road maintenance. Road realignment may occur under this paragraph only if the road is deemed essential for public or private access, natural resource management, or public health and safety;

(5) Road reconstruction is needed to implement a road safety improvement project on a system road determined to be hazardous on the basis of accident experience or accident potential on that road;

(6) The Secretary of Agriculture determines that a Federal Aid Highway project, authorized pursuant to Title 23 of the United States Code, is in the public interest or is consistent with the purposes for which the land was reserved or acquired and no other reasonable and prudent alternative exists; or

(7) A road is needed in conjunction with the continuation, extension, or renewal of a mineral lease on lands that are under lease or for a new lease issued immediately upon expiration of an existing lease. Such road construction or reconstruction must be conducted in a manner that minimizes effects on surface resources, prevents unnecessary or unreasonable surface disturbance, and complies with all applicable lease requirements, land and resource management plan direction, regulations, and laws. Roads constructed or reconstructed pursuant to this paragraph must be obliterated when no longer needed for the purposes of the lease or upon termination or expiration of the lease, whichever is sooner.

12D-020 Maintenance of system roads is permissible

Lands and Special Uses

12D-021 These areas are unsuitable for designation of wind energy development.

13 – Mosaics of Habitat

Background

The Forest-wide vision describes the desired condition for ecological systems diversity. This diversity will be achieved through many different practices across the Forest in many of the management prescription areas. Creating and maintaining the diverse ecosystems requires active management activities in some cases. Prescribed fire can be used in many of the management prescription areas, but is a strong emphasis in this prescription area. This prescription area is the predominant area where timber harvest will be used to create and maintain the ecosystem diversity objectives. This is also the area where wildlife habitat management activities will be focused for both ecological objectives and recreational (hunting and wildlife viewing) objectives. Timber management will be used in this area to meet ecological, recreational and socioeconomic objectives. Meeting the demand for timber products will include timber harvest, salvage of dead and dying trees, and personal use for firewood.

Desired Conditions for Mosaics of Habitat

The landscape character of this area generally retains a natural, forested appearance. The landscape features structurally diverse forest communities, ranging from rich cove and mesic hardwood/pine forests, with predominantly closed canopies, to xeric pine/hardwood open woodlands, with a mosaic of grass/forb/shrub understories. A mid- to late-successional forest greater than 40 years of age dominates the landscape. The area is interspersed with both forest communities greater than 100 years of age and temporary and permanent herbaceous and shrubby openings, providing diversity for both wildlife habitat and scenic attractiveness.

Habitat is provided for species requiring a mosaic of forest types and structures for their life cycle needs, including black bear, ruffed grouse, woodcock, wild turkey, and white-tailed deer. Larger areas of early successional habitat in the form of old fields, wildlife openings, regeneration areas, pastoral areas, and regeneration areas provide habitat for species such as yellow-breasted chat, northern bobwhite, prairie warbler, white-eyed vireos, golden-winged warbler, and cotton-tailed rabbits. Habitat is also provided for species associated with areas of mid- to late-successsional forests. In cove and mesic hardwood/pine forests, with predominantly closed canopies, species needing large areas of mature trees with some level of overstory structural diversity (canopy gaps) are present, including cerulean warblers, worm-eating warblers, wood thrushes, hooded warblers, pileated woodpeckers, salamanders, eastern gray squirrels, and wood turtles. In mature mesic and xeric pine/hardwood open woodlands, with a mosaic of grass/forb/shrub understories, species needing large areas of both mature trees and an open structure are present, including golden-winged warblers, whip-poor-wills, scarlet tanagers, eastern wood pee-wees, northern flickers, Virginia big-eared bats, Indiana bats, fox squirrels, and timber rattlesnakes. In addition, xeric pine/hardwood open woodlands provide habitat for post-breeding and migratory stop-over needs for birds species normally associated with forest interior habitat for breeding.

The mix of forest communities desired varies by the landtype associations in which this prescription is allocated; however, the canopy generally consists of a mixed hardwood forest composed primarily of oaks and hickories in the uplands. The overstory is often relatively closed, multi-layered, and moderately to densely stocked. The midstory is also multi-layered composed of a diversity of shrubs, vines, grape arbors, and saplings. On drier sites a more open woodland character is present with a more diverse understory of shrubs, grasses and forbs. Southern yellow pines increase as sites become drier on south-facing slopes and towards the ridge tops. On drier, xeric pine/hardwood sites, a simpler midstory structure exists. Poplar, birch, and hemlock increase as moisture availability increases downslope to the coves. These cove forests, composed of mixed mesophytic and dry-to mesic oak communities are structurally diverse with canopy gaps and small openings. They frequently contain tall trees with large diameters and provide a home to cerulean warblers in some parts of the forest. Hooded warblers thrive where a dense shrub understory is maintained or enhanced.

A mix of forest successional stages characterizes these areas, with an objective of a minimum of 60 percent of the area greater than 40 years of age and at least 20 percent in late-successional to old growth forest conditions. In addition, 4 to 10 percent of forested land consists of a dispersed system of permanent openings and transitory openings created through both natural disturbance events and forest management activities. Early successional forest provides several important habitat components that change over time unless a patch is maintained every one to three years through mowing or herbicide applications. The grass-forb component, important for grazers and species that feed on insects, is created immediately following a disturbance event and quickly becomes a dense woody understory of shrubs and young trees which provides both hiding cover and soft mast for food. The forested edges created by the opening are prime hunting territory for both avian and fur-bearing predators. As the young forest matures into pole-sized trees, the dense overhead cover provides protection from flying and perching predators and shades out the dense understory increasing the visibility of approaching predators like fox and bobcats. After about 40 years, the forest begins producing hard mast like acorns and pine seeds, which are critical for the winter diet of many species in the southern Appalachians.

A dispersed system of temporary and permanent forest openings and old fields exist, providing herbaceous and shrubby ground cover and abundant insect populations for breeding, post-breeding, and migrating species, such as birds and bats.

Early successional habitat may be concentrated to emphasize habitat for ruffed grouse and woodcock. Although this management is specifically designed for optimum ruffed grouse and woodcock habitat, other wildlife species associated with early successional forest habitats and mixed landscapes expected to inhabit these areas include: eastern towhee, white-eyed vireo, least weasel, whip-poor-will, and orchard oriole. Riparian areas found within this management prescription provide suitable habitat for early successional riparian species like the star-nosed mole, eastern ribbon snake, and golden-banded skipper. At higher elevations optimum habitat for golden-winged warbler and chestnut-sided warbler is also provided. Scattered small patches of early successional forest habitat within the riparian corridor are important for woodcock because grassy and thicket areas near water provide prime nesting and display grounds.

Early-successional habitat in the 2100 to 4000-foot elevation range for species like the golden-winged warbler, is abundant in the form of open woodlands, regenerating forests, old fields, balds, and utility rights-of-way. Many patches of these habitats are over 20 acres in size and, where compatible with other multiple-use objectives, are clustered on the landscape to provide optimum habitat for area-sensitive or area dependent species.

Fire-adapted and dependent ecosystems are plentiful. Open woodland conditions are common and this habitat in enhanced from the use of both prescribed burning and the management of unplanned ignitions for resource benefits.

Portions of this prescription area are managed by natural processes and prescribed fire and contribute to the older aged forest component across the prescription area. These lands include riparian areas, areas of low productivity, and lands where commercial timber harvest is uneconomical. The resulting landscape structure of this land allocation provides a forest matrix appropriate for linking large and medium-sized late successional to old growth patches. Trees greater than 120 years of age occur commonly as individuals, groups, or large areas. Cavity trees, cull trees, standing dead trees, and down logs are common throughout the area as a result of natural mortality.

Rockfalls, caves, road culverts, uprooted trees, and trees larger than 22 inches in diameter serve as potential dens. Known den trees are retained in harvest areas and future den trees will be recruited over the long term on the many acres in older age classes.

Water sources for wildlife, including ephemeral ponds for herpetofauna, are present.

Prescribed fire plays an important role in the maintenance of many of the forested communities found throughout this management prescription. Prescribed fire is frequently used to encourage oak sprouting and reduce competition from more shade tolerant species, to restore and maintain threatened and endangered species habitats, and to ensure the continued presence of fire-dependent southern yellow pine ecosystems. Prescribed fire and commercial timber harvest are employed to

maintain the hard mast producing capabilities of the forest communities containing oaks and hickories.

~~A~~ diversity of tree species of mast bearing age in dominant and co-dominant crown classes is common. Trees with open-grown crowns receiving plenty of sunlight produce the most acorns and the creation of openings 2 acres in size and greater to get full sunlight on the forest floor helps maintain oak regeneration as well as stimulate soft mast and browse production. A diversity of forest age classes is also important in these areas to provide soft mast and herbaceous vegetation.

Forest product commodity outputs contribute to the social and economic well being of the people living in the area and help maintain a way of life long associated with those living within the area. Timber harvesting is apparent and uses sale layout and design to accommodate visual considerations through innovative harvesting techniques and sale layout. Growth capability of suitable land is used at a high level, but well within the biological capabilities for sustained yield production.

Roads provide access for management activities and access for various recreational experiences such as hunting and wildlife viewing. Roadsides can also provide additional open canopy habitat. However, roads also may disturb some wildlife species, particularly during breeding, nesting and brooding times and much of the area will be managed with seasonal road closures to protect physical and biological resources and wildlife habitat.

A range of recreational settings from roaded frontcountry to more remote areas are found in this area. Access is provided through portions of the area on Forest Service and State roads with a gravel or native surface. Challenging opportunities may exist for high-clearance and 4-wheel drive vehicles on open roads.

Forest visitors on foot, horse, or bikes may experience some solitude in portions of this prescription area where roads are managed as closed, but feelings of challenge and risk are not expected. Comfort, sanitation, and camping facilities are not provided, although primitive camping can be enjoyed throughout the area. During most of the year, occasional encounters with other forest visitors can be expected, however these encounters are more frequent during spring and fall hunting seasons. This area provides excellent opportunities for wildlife viewing, hunting, hiking, equestrian use, mountain biking and dispersed camping.

13 Mosaics of Habitat Standards

Terrestrial and Aquatic Species

13-001 Limit creation of early-successional forest habitat to 10 percent of forested acres (based on the contiguous prescription area

13-002 Existing old fields, pastoral areas, wildlife openings, and other wildlife habitat improvements may be present and maintained. Expansion of existing openings and/or creation of new openings may occur. Non-invasive non-natives are sometimes used when establishing food plants for wildlife, but native species are preferred. Some openings provide permanent shrub/sapling habitats as a result of longer maintenance cycles.

13-003 Favor the retention of large (>20" d.b.h.) standing snags and den trees when implementing silvicultural treatments. Known den trees are retained in harvest areas along with an unharvested buffer of at least 100 feet wide on all sides of the den.

Rare Communities and Old Growth

13-004 Patches of old growth within a 13 management prescription block, contribute to the objective of a minimum of twenty percent of the area in late-successional to old growth forest conditions.

Vegetation and Forest Health

13-005 Manage for a diversity of oak species to minimize yearly fluctuations in acorn supplies.

13-006 The forest health strategy is to minimize the occurrence of pest problems by managing host-type conditions. Suppression of pests, both non-native and native, is accomplished with all available integrated pest management tools.

13-007 Proactively manage species composition and tree vigor in stands at a level that reduces susceptibility to damage from insect and disease infestations and other forest health problems like oak decline. Suppress native and non-native insects and diseases using an integrated pest management approach.

Timber Management

13-008 These areas are suitable for timber production.

13-009 Use even and uneven-aged silvicultural systems. Uneven-aged forest management (e.g. group selection, individual tree selection) practices are designed to result in forest structure and composition consistent with late-successional deciduous forest habitats over the long-term.

13-010 Thinning and group selection may be employed to increase the structural diversity of the prescription area.

13-011 Thinning is frequently used to increase volume production and tree vigor and manage species composition. Uneven-aged management, using group selection, may be employed to reduce impacts to scenery.

13-012 Regeneration harvest areas range in size from 2 to 40 acres.

13-013 Regeneration harvest areas are primarily coppice with reserves[3] with 15- 25 square feet of basal area per acre left to ensure adequate sunlight for oak regeneration and two-aged silvicultural systems which leave 20-40 square feet of basal area per acre. In order to provide vertical diversity and future mast production, leave trees with a mean diameter of the codominant trees in the stand.

13-014 Clearcut harvest systems may occur when necessary to achieve specific wildlife habitat objectives. Thinning and group selection silvicultural systems are also employed to provide the structural diversity required by some species within this habitat association.

13-015 Regeneration harvest areas may occupy up to 16 percent of a project analysis area in order to provide 4-10 percent of an individual contiguous management prescription area in early successional forest habitat conditions and to cluster these conditions on the landscape.

13-016 Regenerate pine forest types artificially or naturally to native pine species that commonly occur within the same land type association. Regenerate pine-hardwood forest types artificially or naturally to mixed pine-hardwood stands of native species that commonly occur within the same land type association.

13-017 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	100-120
Cove hardwoods	80-100
White pine	80-100
Yellow pine	80-100
Scarlet oak/Black oak	80-100

13-018 Salvage of dead and dying trees is allowed.

Non-timber Forest Products

13-019 Commercial and personal use firewood collection is allowed.

Prescribed Fire and Unplanned Natural Ignitions Use

13-020 Prescribed fire and unplanned natural ignition use are allowed to: create openings that stimulate soft mast production and browse; encourage oak sprouting; maintain, restore, and enhance native forest communities; ensure the continued presence of fire-dependent ecosystems; improve threatened, endangered, sensitive, and locally rare species habitat; and reduce fuel buildups. It is also used in conjunction with site preparation to accomplish silvicultural treatments.

Recreation

13-021 Wildlife openings, including linear strips, are signed to protect established vegetation from recreational use (e.g. horseback riding, mountain biking, OHV use, and camping) when a reoccurring problem exists.

Scenery

13-022 Management activities are designed to meet or exceed the following Scenic Integrity Objectives, which may vary by inventoried Scenic Class:

Inventoried Scenic Class	1	2	3	4	5	6	7
Scenic Integrity Objectives	H	M	L	L	L	L	L

13-023 Clustering of early successional habitats occurs primarily within scenic classes 3 through 7.

13-024 Management activities are designed to meet or exceed a high Scenic Integrity Objective in semi-primitive motorized and non-motorized areas within this prescription area.

Roads

13-025 Road construction, reconstruction, and decommissioning are informed by a watershed-scale or site-specific road analysis.

13-026 Do not increase current open system road density levels calculated across each prescription block.

Management for ruffed grouse and woodcock may require Forest Plan direction that is distinctive enough from the direction provided in the larger blocks of Management Prescription Area 13 (Mosaics of Habitat) that it will need its own management prescription area direction but here are what standards specifically for ruffed grouse and woodcock would look like.

For the areas to managed for ruffed grouse/woodcock emphasis:

Water, Soil, and Air

8E1-001 Early successional habitat openings are a minimum of 25 feet from perennial streambanks.

8E1-002 Early successional habitat openings larger than 5 acres may extend into the riparian corridor as long as the opening in the riparian corridor is not greater than 5 acres in size.

Terrestrial and Aquatic Species

8E1-004 Retain an average of one large (>12" d.b.h.) down tree per acre as drumming logs.

8E1-005 Maintain or increase pine stands to provide winter thermal cover.

8E1-006 Limit creation of early successional forest habitat to 16 percent of forested acres (based on the contiguous prescription area).

Vegetation and Forest Health

8E1-007 Retain patches of coniferous cover during site preparation and timber stand improvement activities when consistent with overall regeneration and species composition objectives.

8E1-008 To achieve the structural habitat conditions for ruffed grouse, retain <20 square feet of residual basal area per acre in harvest units, favoring oaks of mast-producing size as residuals.

8E1-009 Retain high stem density evergreen shrub thickets on at least 5-10% of the area to provide cover for adult ruffed grouse.

8E1-010 Maintain mature/immature oak "edges" with high stem density for grouse.

8E1-011 Maintain brushy edge around permanent wildlife openings for grouse. Encourage or plant soft mast-producing species in this zone.

Timber Management

8E1-012 Primary regeneration harvest method is clearcutting (with 6 reserve trees per acre for potential Indiana bat roost trees). Coppice with reserve harvests may be used where scenery concerns override habitat needs.

8E1-013 Regeneration units range from 5 to 20 acres in size, the optimum size of clearcuts for ruffed grouse.

8E1-014 Manage regeneration harvest areas with the following rotation ages:

Upland hardwoods	80-100
Cove hardwoods	70-90
White pine	60-80
Yellow pine	60-80
Scarlet oak/Black oak	60-80